NB 261

FOR TABLE OF CONTENTS SEE PAGE II.

REGISTERED C. 6

THE

INDIAN LANCET.

A Weekly Journal of Medicine, Surgery Public Health and of General Medical Intelligence.

Edited by RUDOLPH MONNIER M.B., M.S., Edin.

Vol. XXXI.] CALCUTTA, MONDAY, MARCH 30th, 1908. [No. 13.

SAUNDERS'

BOOKS ON

Diseases of Children

Kerley's Treatment of Children's Diseases JUST READY—THE PRACTITIONER'S PEDIATRICS

There has long existed the need of some modern work from which the general practitioner could obtain quickly the desired information on any disease of childhood; a book that would express the latest therapeutic thought, stated clearly, concisely, and definitely. Dr. Kerley has supplied just such a work—a practical book, planned and written for the practitioner's daily use. Modern methods of management and treatment are given in greater detail than has ever before been attempted; and the means and methods prescribed have the distinct advantage of having been drawn from actual clinical experience. In every case the therapeutic directions given are definite and complete. The diseases are discussed systematically and in detail, telling just what measures should be instituted, what drugs given, and in many cases valuable prescriptions are included. There is a large chapter devoted to therapeutic measures other than drugs, and an excellent illustrated chapter on Gymnastic Therapeutics, giving explicit directions for the correction of certain abnormalities in which gymnastics have proved efficacious. A large chapter on Drugs and Drug Dosage will be found extremely helpful to the practitioner.

Octavo of 597 pages, illustrated. By Charles Gilmore Kerley, M.D., Professor of Diseases of Children, New York Polyclinic Medical School and Hospital. Cloth, 21s. net.

Kerr's Diagnostics of Children's Diseases JUST READY

Dr. Kerr has discussed his subject with the objective symptoms as the foundation, presenting them so clearly and concisely that his work will be of inestimable value to every practitioner. The constant aim throughout has been to render a correct diagnosis as early in the course of the disease as possible, and for this reason differential diagnosis is presented from the very earliest symptoms. Just sufficient of etiology and pathology has been introduced to assist in arriving at right conclusions; and the sequelæ of the various diseases have been considered only to the extent that they may be of value in anticipating them and thus aiding in their early diagnosis. The many original illustrations are all of a high order. The physician will find these pictures a source of much information and help in his daily pediatric work.

By Le Grand Kerr, M.D., Professor of Diseases of Children, Brooklyn Post-Graduate Medical School. Octavo of 550 pages, illustarted. Cloth, 21s. net.

Ruhrah's Diseases of Infants and Children RECENTLY ISSUED

In Dr. Ruhrah's book all the important facts are given concisely and explicitly, the therapeutics of infancy and childhood being outlined very carefully. The feeding of infants is given in detail, and the entire work is amply illustrated with practical illustrations. A valuable aid consists in the many references to pediatric literature, so selected as to be easily accessible by the student, enabling him to ascertain the sum of knowledge concerning any given disease.

12mo of 404 pages, fully illustrated. By John Ruhrah, M.D., Clinical Professor of Diseases of Children, College of Physicians and Surgeons, Baltimore. Flexible leather, 10s. net.

Hecker, Trumpp and Abt's Diseases of Children JUST ISSUED

These three eminent authorities have produced a work of the greatest value to the general practitioner, for it is he who is most frequently called upon to prescribe in the diseases of childhood. For this reason also diagnosis and treatment have received special attention. The lithographic plates illustrate every disease that a physician may meet in his practice.

With 48 lithographic plates, 144 text-cuts, and 450 pages of text. By Dr. R. Hecker and Dr. J. Trumpp, of Munich. Edited, with additions, by Issac Abt, M.D., Assistant Professor of Diseases of Children, Rush Medical College. Cloth, 21s. net.

W. B. SAUNDERS Co., 9, Henrietta St., London, W.C.

Australian Agency 430, Bourke St., Melbourne, where our books can be bought at London prices.

THE INDIAN LANCET.

Vol. XXXI.] CALCUTTA, MONDAY, MARCH 30th, 1908. [No. 13

Contents.

—:o:o:—

ORIGINAL ARTICLES.

The Plasmodium Malariae Outside the Body of Man, and the Experiments, with Deductions.—By C. D. Simmons M.D. 527

Routine Examination of the Urine for Indican.—By Joseph Day Olin, M.D.... 529

Ectopic Pregnancy.—By W. M. Randolph, M.D. 531

Neurasthenia or Nervous Exhaustion.—By John D. Bonnar, M.D. ... 535

The Differential Diagnosis of Surgical Lesions in the Upper Abdomen.—By J. Norment Baker, B.A., M.D. ... 539

A MIRROR OF PRACTICE

The Treatment of Chilblains.—By F. Gardiner, M.D., F.R.C.S... ... 542

ANNOTATIONS.... 544

LEADING ARTICLES.

Indian Municipalities. 545

CURRENT MEDICAL NEWS.

A Lunacy Sensation. 546

I. M. S. Officers and Fees.—Vaccination in the Punjab. 549

SHORT ITEMS.... 550

CURRENT MEDICAL LITERATURE

MEDICINE 553

SURGERY 553

OBSTETRICS 554

PATHOLOGY 558

THERAPEUTICS 558

CORRESPONDENCE

The Mussoorie Sanitarium.—Rats and Plague.—Pasteur Institute of Southern India. 562

The Hospital Nurses' Institution. ... 565

A Hindu General Hospital in Embryo. 566

REVIEWS OF BOOKS 569

GOVT. MED. NOTIFICATIONS ... 569

The Greatest Time-Saving and Tube-Saving Invention in Clinical Thermometers.

A 30 SEC. CLINICAL RESET IN AN INSTANT

IS THE "REPELLO."

LITERALLY:

"I PUSH BACK."

ZEAL'S PATENT No. 19593.

No Shaking Down, Glass throughout. Hermetically Sealed Press flattened bulb at top and it is instantly reset. Nothing to go wrong. Tested and passed at Kew. Patented U.S.A. and on the Continent.

All our Thermometers are made from "Normal Glass" which prevents the bulb contracting, making them perfectly accurate for all time.

G. H. ZEAL, 82 Turnmill St. London, England,

Manufacturers of all kinds of Clinical and other Thermometers.

To be obtained of all Instrument Houses, Chemists and Opticians.

HEADACHES.

The great majority of headaches and so-called bilious attacks arise from defective eyes, and would be entirely prevented by wearing the proper glasses. Many people who seem dull, and stupid, would be found to be intelligent and bright if their eyes were attended to and their eye-strain relieved by the use of proper glasses. Mine is a new firm, and the most up-to-date in all its methods.

WALTER BUSHNELL, F.I.O., F.S.C.M., D.B.O.A.,

Certificated Eyesight Specialist,

13, DALHOUSIE SQUARE, CALCUTTA.

WANTED—KNOWN—COLLEGE OF Physicians and Surgeons of Calcutta: First Arts Entrance and Middle English students desirous of being admitted to the M. C. P. S. and L. C. P. S. classes should have their names enrolled without any further delay. Session 1908-09 commenced 15th June. Dissections; Hospital and Outdoor Dispensary. Prospectus on application. Further particulars, apply DR. RUDOLPH MONNIER, Secretary, 3. Wellesley Street.

VICHY ETAT

AGAINST

ARTHRITISM, GOUT, RHEUMATISM

Drink at every meal

VICHY CELESTINS

The best of all Mineral Waters.

General Agents for British India:

EUGENE MEIFFRE, Calcutta.

VICHY ETAT

THE ONLY RELIABLE DISINFECTANT EXTANT.

BEWARE OF SPURIOUS IMITATIONS.

NINETEEN GOLD SILVER AND OTHER MEDALS AND AWARDS

SOLE AGENTS
M. M. FRASER & CO.
59, BENTINCK STREET
CALCUTTA.

PROPRIETORS & MANUFACTURERS:

MORRIS, LITTLE AND SON, DONCASER, ENGLAND

The Medical Profession

of almost every country has found, after exhaustive trial, that for permanency, palatability, and perfection in manufacture, nothing takes the place of

Scott's Emulsion

of Pure Norway Cod-liver Oil with Hypophosphites of Lime and Soda. Scott's Emulsion is always uniform in quality, permanent in form, and its integrity cannot be doubted. It is a perfect emulsion.

We respectfully request that Physicians will give Scott's Emulsion a trial in all cases where Cod-liver Oil is indicated.

SCOTT & BOWNE (Ltd.), Manufacturing Chemists, (2)
46 to 48, Great Saffron Hill, and 13, Cross Street, Hatton Garden, E.C.

Removed to 10/11 Stonecutter Street, Ludgate Circus, LONDON, E.C.

OSLER

Manufacturers of

Electric Fittings. Electrical Engineers to

H. E. LORD MINTO, Viceroy of India.

We have now on view at our showrooms a varied and choice selection of Electric fittings in metal and glass.

Single pendants fittings from		**Rs. 4-8**	**upwards.**
Electr oilers	**„**	**„ 50-0**	**„**
Table lamps	**„**	**„ 10-0**	

All of our own make, best finish throughout.

F. & C. OSLER.

CALCUTTA.

THE INDIAN LANCET.

SUBSCRIPTIONS *(payable in advance)*:—

Rs. 18 For Government Medical Officers, Civil and Non-official Physicians and Surgeon

Rs. 10-8 For Medical Missionaries, Assistant-Surgeons, and Apothecaries.

Rs. 7-8 For Hospital-Assistants and Medical Students

Unless notice be given to discontinue a subscriber's name on our list it will be carried on for a further term.

*** Single copies, current issue, 8 annas each. Old issues, Re. 1 per copy copies supplied for broken periods will be charged for at 8 As. each

All Business Communications referring to Advertisements, Changes of Address, &c., should be addressed to the Manager. 3 Wellesley Street, Calcutta

Sole Agents in Great Britain.

Messrs GORDON & GOTCH 15 St. Bride Street, Ludgate Circus London, E.C.

B. P. CHEMICALS

Acid. Sulph. Pur.	Alcohol 90 0/0.
„ Hydroch Pur.	Sp. Vini Rect 60 0/0.
„ Nitric Pur.	Aether Purificatus.
Liq. Ammon. Acet. Fort.	Collodium.
„ Ferri Perchlor.	Sp. Amon. Arom.
„ Zinci Chlor.	„ Aether Nit.

Manufactured According to British Pharmacopia and Guaranteed Pure Cheap rates for wholesale Buyer

D. WALDIE & CO., CALCUTTA.

CYONA.—CYONA.—CYONA'

FAMOUS REMEDY FOR SORES, WOUNDS, CUTS.

BRUISES, etc, etc.

(HUMAN AND VETERINARY.)

Tincture—Oil—Ointment—Powder

Can be obtained from all Chemists.

DELICIOUS

RED WHITE & BLUE

COFFEE.

For Breakfast & Dinner

KAVIRAJ N. N. SEN'S

KESHRANJAN

Exercises a tonic influence on the hair-roots. Relieves nervous headache, promotes a vigorous growth of hair. KESHRANJAN is a safe and certain remedy for baldness and sparse or thin hair.

It restores the pristine hue and beauty of the hair and prevents its falling out or turning prematurely grey. Keshranjan has a delicate perfume and renders a valuable hair-dressing and toilet-requisite.

Price :—Re. 1 per Bottle.
Re. 1-5 post free.

OUR CURE FOR HYDROCELE :—Cures Hydrocele, without surgical operation. Price for 2 week's measure Rs. 2; Packing and postage As. 7.

OUR ARSOHARA BATIKA Cures, Piles, bleeding or blind and Fistula, without surgical operation. Price per box Rs. 1-4; Packing and postage As. 3.

OUR SPECIFIC FOR DIABETES :—Cures Diabetes insipidus and mellitus. It entirely removes general weakness, excretion of large quantity of urine having a faint apple-like odour and a high Specific gravity dryness and harshness of skin, constipation, constant thirst, failure of general health with a sense of burning in palms and soles, diminution in weight, slight œdema of legs, chloroform-like smell of breath, sponginess of gums constant tense of sinking at stomach, with voracious appetite, acid eructation, drowsiness of spirit, &c. Price per two boxes with a phial of oil, Rs. 5. Packing and postage As. 10.

Kaviraj Nagendra Nath Sen,

GOVT. MEDICAL DIPLOMA-HOLDER,
Nos. 18-1 & 19, Lower Chitpur Road, Calcutta.

LAWRENCE & LYNCH'S

"EYE-KEEP" DROPS

Registered and Protected against Infringements under the Trade Marks Act.

THE new and painless application for Diseases of the Nerves, Muscles, Veins, Arteries and Capillaries connected with the Organ of Vision. It gives new strength, vitality and brilliancy to weak, fading and old eyes. It soothes Congested, Inflamed, Watery and Overstrained Eyes; corrects Dimness of Sight, specks before the Eyes, Intolerance of Light, Acute and Chronic Ophthalmia, Short-sightedness, Colour and Night-blindness, Ulceration of the Cornea, bloated Eye-sac, Fatty covering over the Eyeball, and other Diseases peculiar to the Eyes, however Chronic they might be. On account of its undisputed power of absorbing the curd-like whitish crystalline film of Cataract from the very root, it has been pronounced a real boon by all those suffering from this distressing and most dangerous disease, avoiding by its use a most delicate, painful and risky operation. Being composed of pure drugs which have, after years of experience, given the best results, it is perfectly harmless and can never possibly do any injury even to the most delicate and sensitive eyes. ☞ It is perfectly safe in the most inexperienced hands; whilst on account of its cool, pleasant and most refreshing sensation to the eyes it is, whilst being used, scarcely looked upon as a medicine. ☞ Its introduction has made a radical change in the treatment of eye-diseases, and thousands of patients all over India gratefully remember the day they first saw our advertisement, and putting aside all prejudice gave it a fair trial.

DIRECTIONS enclosed.—Per bottle, Rs. 2. Dozen, Rs. 22.

THOUSANDS LIKE THE FOLLOWING:

MR. M. P. JACKSON, Contractor, writes from Nattore:—"I am using the 'Eye Drops' sent a short time ago, and find it doing a great deal of good."

MR. FRANK ROSE, writes from Karwi:—"EYE-KEEP DROPS"—"An excellent remedy for weak eye-sight. My sister tried it with success. Our Dhobie had a most dreadful blood-shot eye; this medicine restored him. Please send me another phial."

MR. JOHN BAKER, writes from Vizagapatam:—"Please send me another phial of the 'Eye-Keep' Drops, as I feel my eyes getting better and the Cataract is cut off. Only the speck is on the sight: so I would be very thankful if you would send me another phial."

PREM SING, Station Master, N.-W. Ry., Saun Station *viâ* Mauphand, writes:—"Kindly send me per V.-P.P. another phial of your 'Eye-Keep' Drops, early. The one tried by my old father has done him a deal of good."

MR. J. BENTON, P.W.I., Karimganj, writes:—"Please send me per V.-P.P. another two phials of the 'Eye-Keep' Drops. After using a few drops for a few days, I was surprised I could read without the aid of glasses."

WHOLESALE AND RETAIL OF THE

SOLE PROPRIETORS:

LAWRENCE & LYNCH,

Manufacturing Chemists,

EMPIRE CHEMICAL WORKS, CALCUTTA.

Enormous sales for Dr. Lawrence's

ANTIBILIOUS PILLS

(Manufactured from the Original recipe of Dr. Lawrence, M.D.)

For Constipation, Sluggish Liver, *Liver Complaints, Dyspepsia*, Fevers, Impurities of the Blood, and in other Diseases where purgative medicines are required. ☞ Unlike other Cathartics they do not make you feel worse before you feel better. They are specially prepared, are free from Aloes, Mercury, or any deleterious ingredient, and are brisk and direct in operation, being unattended by disagreeable effects, *viz.*, griping, nausea, vomiting or pain. Powerful purgatives aggravate Constipation. ☞ These pills stimulate the Liver, cleanse the Bowels from all irritating substances, and restore a perfectly healthy condition. They effectually replace many other *professedly* Antibilious Pills, Vegetable and other Laxatives, which are rarely what they really profess to be. ☞ In cases of severe Cold, threatening Fever, accompanied with Headache, pains in the back and limbs, a dose of these Pills will drive away the Cold and prevent the Fever. ☞ If you have a coated tongue with a salty taste, a dose will cleanse the stomach of the foul matter which is the cause, take away the bad taste, bring back the appetite, and thus ensure a return of health. ☞ As a cure for that uneasy and disagreeable feeling "knocked down" due to late hours, these Pills, at bed-time will render you "fit" in the morning, acting thus as a "pick-me-up" by cleansing the bowels from the ill-effects of excess in eating and drinking. ☞ They are the safest and best PILLS, and with LIVER INVIGORATOR, are a certain cure for Dyspepsia (Indigestion) and Torpid Liver, both of which are the bane of Europeans and of the Natives of India. ☞ No family should be without them. In patent wooden boxes with our protecting band. Per box, Re. 1. Per Dozen, Rs. 11. *Thousands of Testimonials.*

DOSES AND DIRECTIONS FOR ADULTS.

For Indigestion; Impaired Appetite.—One Pill an hour before dinner. *For Acidity; Flatulency; Heartburn.*—One or two occasionally. *For Headache; Giddiness; Dimness of Sight.*—Two at any time. *For Costiveness; Yellowness of the Skin, etc.*—One or two at bed-time twice a week. *For Intemperance in eating or drinking.*—Two or three on going to bed. *For Disordered state of the Stomach and Bowels.*—Two, as occasion may require. *For Impurities in the Blood; Cutaneous Affections, etc.*—One Pill every night.

☞ In cases of Congested Liver, Dyspepsia and Indigestion, accompanied with pains and aches in the right side, shoulders, stomach, etc., rub LINOLEUM as an external friction remedy, whilst LIVER INVIGORATOR & ANTIBILIOUS PILLS are being used. ☞ Particularly notice that the name LAWRENCE & LYNCH is on the Label, Wrapper and Protecting-band. ☞ Refuse imitations.

WHOLESALE AND RETAIL OF THE

SOLE PROPRIETORS:

LAWRENCE & LYNCH

Surgeons and Medical Specialists,

3, WELLESLEY STREET, CALCUTTA.

***Telegraphic Address:*—"Indigenous, Calcutta."**

LADIES! WHY SUFFER?

When you can be immediately RELIEVED and in a short time permanently CURED by LAWRENCE and LYNCH'S

PRUNIMENVIB.

Scores and scores of females suffer in silence the maladies peculiar to their sex:—Irregularities, Obstructions; Leucorrhœa, or whites; Chlorosis, or Green sickness, disappear, as if by magic, on the administration of this invaluable specific.—The first dose gives relief. A few doses cure. Try it. ☞ Ladies! we have specially studied your diseases. We can cure you.

Price: Rs. 5-8 per bottle, 64 doses. Small size, Rs. 3, containing 32 doses. Three large bottles, Rs. 15-8. Six large bottles, Rs. 30-8. Per dozen, Rs. 60. Packing free for 3, 6, and 12 large bottles.

"QUEEN OF THE WORLD."

MOTHERS! PRUNIMENVIB can be given with safety and confidence to unmarried girls when they complain of headache, lassitude, poorness of blood, loss of appetite; scanty, irregular or delayed shows, and in cases of wasting. Even here it is "Queen of the World." Worth its weight in gold. Every dose effective. Try it. It never fails.

Thousands of Testimonials

The *Indian Lancet* says:—In disturbances of the menstrual functions Prunimenvib has gained the reputation of a standard remedy. In those forms of menstrual disorders in which there is no organic disease but a functional disturbance, its continued administration in connection with appropriate hygienic regulations, has been sufficient to produce a cure."

A lady writes:—"I have been a sufferer from acute agony for many years. Three bottles set me right."

Another lady writes:—"My life was a burden and I dreaded the approach of the usual shows. For four days I used to writhe in agony, but a few bottles of your Medicine has restored me to perfect health. Please send four more large bottles, as I do not wish to be without it."

A mother writes:—"What a boon your invaluable medicine 'Prunimenvib' has proved itself to my daughter, aged 18, who had been a martyr to periodical pains, and has been suffering from Debility for many years. It was with great reluctance I made up my mind to try your medicine, having failed with Doctor's prescriptions and every advertised remedy which was recommended. Now my child is quite well. Send me two more large bottles please."

WHOLESALE AND RETAIL OF THE
SOLE PROPRIETORS:
LAWRENCE & LYNCH,
Surgeons and Medical Specialists,
3, WELLESLEY STREET, CALCUTTA.

Telegraphic Address:—**"Indigenous, Calcutta."**

Whatever Irritates and Poisons the Blood Produces Disease and Shortens Life.

GIANT BLOOD MIXTURE

Is now acknowledged to be the GREATEST Human Sanitary Agent ever discovered in the Annals of Medicine. It cleanses the body from all humours, purifies and enriches the Blood, so that it is utterly impossible for Disease to exist where so powerful an Agent is introduced. It never fails to cure pimples on the face and hands, blotches, ulcers, discharges, glandular swellings, black-heads, eczema and every other disease resulting from blood which has become impure and poisoned from any cause.

Per bottle, Re. 1-8. Per doz., Rs. 16-8.

HE FEELS BETTER.—MR. D. C. writes from Jamalpore:—"I have just finished three bottles of your 'Giant Blood Mixture.' The pimples on my face have quite disappeared, as also the dark purple marks under the eyes. I feel better on the whole. Send me," &c.

A NATIVE of Cochin writes:—"I began to use the 'Giant' and I am extremely glad to tell you I saw good results, which now compels me to write to you for some more. The 'Giant Mixture' has caught hold of the 'Devil' (S.....s) in my system and a great contest is going on, and in the contest the 'Giant' proves stronger and is gaining ground over the 'Devil.' Send me," &c.

MR. R. F. A. writes from Hong-Kong:—"In informing you regarding the medicine 'Giant Blood Mixture,' I have not the least hesitation in saying that I am now another individual. My friends can scarcely believe that a few bottles of your medicine have worked this change in me. All the symptoms seem to be quite controlled and the poison eradicated."

GIANT BLOOD MIXTURE.

"Nothing to equal it."

No, there is nothing to equal "Giant Blood Mixture" as a Depurative Agent. It is a powerful and at the same time gentle purifier of the blood, and is invaluable for the restoration of tone and strength consequent on the system becoming debilitated by impoverished and impure blood.

MR. D. R. D. writes from Cochin:—"The six bottles of 'Giant Blood Mixture' have given excellent results. Please send me by return post two dozen more. Your Antibilious Pills are invaluable. Enclose six boxes in the Parcel."

MR. W. M. writes from Lahore:—"Really there is nothing to equal your 'Giant Blood Mixture.' The dozen bottles you sent me have almost cured me. The Eruptions have almost gone and the languid tired feeling is no more. Will you very kindly send me another dozen bottles."

WHOLESALE AND RETAIL OF THE
SOLE PROPRIETORS:
LAWRENCE & LYNCH,
Manufacturing Chemists,
EMPIRE CHEMICAL WORKS, CALCUTTA.

CAUTION.—The Proprietors will take immediate legal proceedings against persons pirating their Registered Trade-Mark, "GIANT BLOOD MIXTURE," Labels, Wrappers, &c., or Advertisements, or in any way infringing their rights.

LISTERINE

The standard American antiseptic for internal and external use.

(Awarded Gold Medal (Highest Award) Lewis & Clark Centennial Exposition, Portland 1905; Awarded Gold Medal (Highest award) Louisiana Purchase Exposition, St. Louis, 1904; Awarded Bronze Medal (Highest Award) Exposition Universelle de 1900, Paris.)

Listerine is an efficient and very effective means of conveying to the innermost recesses and folds of the mucous membranes that mild and efficient mineral antiseptic, boracic acid, which it holds in perfect solution; and whilst there is no possibility of poisonous effect through the absorption of Listerine, its power to neutralise the products of putrefaction (thus preventing septic absorption) has been most satisfactorily determined.

LISTERINE DERMATIC SOAP

A saponaceous detergent for use in the antiseptic treatment of diseases of the skin

Listerine Dermatic Soap contains the essential antiseptic constituents of eucalyptus (1%), mentha, gaultheria, lard thyme each (1%), which enter into the composition of the well-known antiseptic preparation Listerine, while the quality of excellence of the soap-stock employed as the vehicle for this medication, will be readily apparent when used upon the most delicate skin, and upon the scalp. Listerine Dermatic Soap contains no animal fats, and none but the very best vegetable oils; before it is "milled" and pressed into cakes it is supper-fatted by the addition of an emollient oil, and the smooth, elastic condition of the skin secured by using Listerine Dermatic Soap is largely due to the presence of this ingredient. Unusual care is exercised in the preparation of Listerine Dermatic Soap, and as the antiseptic constituents of Listerine are added to the soap after it has received its surplus of unsaponified emollient oil, they retain their peculiar antiseptic virtues and fragrance.

A SAMPLE OF LISTERINE DERMATIC SOAP MAY BE HAD UPON APPLICATION TO THE MANUFACTURERS—

Lambert Pharmacal Co., St. Louis, U. S. A.

Hygienic Bathing.

ELLWOOD'S

SURF SEA SALT.

For Producing a Real Sea Bath at Home.

Recommended by the Highest Medical Authorities.

The Best Security for Health, Happiness, Beauty, and Long Life.

The only actual Sea-Salt in the Market.

Extracted from the Ocean.

DIRECTIONS:—One or two tablepoonfuls in the Bath.

ELLWOOD & CO., GLOBE CHEMICAL WORKS, CALCUTTA.

THE STANDARD

LIFE ASSURANCE COY.

Is the oldest established Life Office in the East. Every class of Annuity and Assurance business transacted.

FUNDS	REVENUE
£ 11,750,000	£ 1,475,000

Apply for Forms and quotations of rates to suit all contingencies to

W. E. HILL, Secretary, Standard Buildings, Calcutta.

Policies issued at English Rates.

Original Articles.

Qui docet, discit

THE PLASMODIUM MALARIAE OUTSIDE THE BODY OF MAN, AND THE EXPERIMENTS, WITH DEDUCTIONS.

By C. D. Simmons M.D.

Most of our knowledge of malaria since the discovery of the plasmodium, by Laveran, has been through such indefatigable workers as Thayer and Councilman in this country; Ross in England; Marchiafava and Celli in Italy. Through them we have a most thorough knowledge of the wanderings of the plasmodium through man and the mosquito. Outside the body of man and the mosquito all is a sealed book, for we know practically nothing of the original host of this low land monster. It is not only a monster, but a giant, as it can fell the strongest man in a day.

During my stay of eleven years in the swamps of Ascension Parish, I was in daily touch with perhaps every form of malaria known to man. Hemoglobinuria and even the hemorrhagic type were quite common. I saw a large number of cases that were extraordinary in symptom complex as well as fatality. I will give a history of three cases taken at random from my practice, for the reason that these cases impressed me very much at the time.

Case 1.—Mrs. B, aet., 45, general health good, was taken at the noon hour with severe epigastric pain. I found the patient in agony and with normal temperature; no cause could be found for the pain. The patient was made comfortable by giving morphin and atropin by needle. I was called at the same hour on the following day, and found my patient practically in the same condition as I found her upon my first visit. I now made a diagnosis of malaria without reservation. Quinin given for a few days gave the happiest results.

Case 2—A fine, healthy girl of 8 years old was taken with a chill at 11 a.m. I saw her at 1 p.m., and stated to her parents that she would not live more than thirty minutes. She died in just twenty minutes after my arrival. I do not know of any other microbic or parasitic disease that has proven as rapidly fatal as this. Cholera perhaps approaches nearer than any other. The only solution of this rapidly fatal case must be laid at the door of toxalbumens. The nerve centers were overpowered by this highly toxic substance as soon as it swept the field of the circulation. Such a death is enough to make the heart sick, even steeled as we are to the wildest death scenes.

Case 3—Mr. T. L., aet. 38, general health good. I saw him shortly after his first chill, and gave an unfavorable prognosis. He had been troubled with one or two light attacks of malaria prior to my visit, but nothing severe enough to cause him to cease his farm work. The urine of my patient, which had been voided about an hour before I reached him, was of dark red color, and had coagulated into a nearly solid mass. I had considerable difficulty in getting the urine to enter the mouth of a quinin bottle. This specimen proved to be of the hemorrhagic type, as red blood corpuscles were found under the microscope. This was the last urine to enter the bladder, which fact was demonstrated by passing a catheter. Upon boiling, the urine was almost completely solidified; only a small portion of fluid, resembling blood serum, remained at the top of the test tube. The skin and conjunctivæ were almost of a grass green color. When standing upon the opposite side of the patient from the window a greenish reflection was plainly visible on the pillows and sheets. My patient died in forty-eight hours after the onset of the trouble.

A phenomenon of unusual interest to me was the fact that many of the young farmers who seemed to be immune to malaria under ordinary circumstances, would invariably contract the disease very soon after beginning work in the forest, where it was their custom to go to procure timber, such as fencing for their farms. Their mode of living in the forests was not out of the ordinary. They returned to their homes at night, which in most instances were only about two miles distant. In one case, a healthy young farmer, descended from exceptionally healthy parentage, always came down with acute malarial infection in a few days after beginning work in the woods. In this case I was able to thoroughly follow out their

way of living during their stay in the timber lands. His brother always accompanied him, and both of them dwelt under their father's roof. The people, as a rule, slept under a mosquito netting, as I was constantly urging them to protect themselves as far as possible from the bite of the mosquito. It was a habit of daily occurrence for the timber men to remove their shirts and to work in this nude condition for hours at a time, and exposing their bodies to the bite of myriads of mosquitos. I know of no other way to account for these outbreaks of malaria than the direct inoculation of my patients by mosquitoes far removed from the haunts of men. The question naturally arises, where did the mosquito get the plasmodium? The large and beautiful mosquito known as Anopheles punctipennis are very abundant throughout Ascension Parish. They are easily distinguished from other varieties by following the description given by L. O. Howard in his excellent work on the mosquito.

Several years before leaving the Parish of Ascension I equipped myself with a good microscope and all necessary staining material in order to study malaria in every possible way, and to this end I gave such time and talent as I possessed to the work, believing my field to be one of the finest in the world for malarial research.

Having satisfied myself, clinically at least, that man is often infected with malaria from mosquitos that had not previously fed upon his blood or any other human, I started a series of investigations to locate, if possible, the plasmodium outside the bodies of man and the mosquito. The intimate relations existing between the dragon fly and the mosquito led me to examine the blood of a large number of these insects under the microscope. Upon two occasions I found large circular bodies which had an active internal motion. The central portion was somewhat darker than periphery, but no pigment granules could be made out. They were about the size of a white blood corpuscle. These bodies seemed to attract large numbers of little granules of dancing protoplasm. I next turned my attention to the blood of birds, using fresh specimens for examinations. In quite a number of the slides examined showed an organism identical with that of the plasmodium. It is interesting to note that nearly all of the malarial organisms found in bird's blood are of the flagellate variety. This is no doubt due to the higher temperature of birds' blood as compared with that of man. The rapid fall of temperature of birds' blood as soon as it is placed upon the slide must make it uncomfortable for the parasite, as the flagella become active in a few seconds. After studying the plasmodium in the blood of the avis as well as in that of the genus homo, I feel satisfied that nearly all full-grown forms of plasmodia have the power to use their flagella, and that they are not seen until five or ten minutes after human blood is placed upon the slide, makes it almost certain that the flagella are used in a struggle for oxygen or other substance necessary to the life of the organism. Upon one occasion while examining a fresh specimen of human blood, I had the good fortune to find a plasmodium of the flagellate variety in a perfectly clear field. The flagella was plainly visible and of gray color. The flagellate movements ceased in about five minutes and seemed to return to the body of the parasite.

It has occurred to me that birds may be at least one of the hosts of the malarial parasite. The young birds before they are feathered, and the old ones during the moulting season, have many vulnerable points in their armor where the mosquito can use his hypodermic needle to his satisfaction. As many of our swamp birds are migratory, and principally come from Central and South America during spring and summer, it is possible that some of our graver forms of malarial troubles are brought here in this way. Many of these birds and the Anophele mosquito are found together in the same swamps.

It is a well known fact that birds, malaria and the mosquito follow swiftly upon the heels of the woodman and his ax.

It is with the hope that some young physician located in the lowlands of our State, with heart, head and hand attuned to this work, will become interested and pursue it until better results are attained then I have been able to accomplish, that this disjointed article has been written.—THE NEW ORLEANS MEDICAL AND SURGICAL JOURNAL.

THE PRESERVATION OF EYESIGHT.

(1) Avoid reading and study by poor light.

(2) Try to have light from the side and not from the back or front.

(3) Do not read when you are lying down.

(4) Do not read while suffering great bodily fatigue.

(5) Do not use the eyes too long at a time for near work.

(6) Avoid stooping position or anything which tends to produce congestion of the head and the face.

(7) Always use well printed books.

(8) Avoid alcohol and tobacco as these injure the eyes.

(9) Take sufficient open-air exercise.

(10) Attend to both physical and mental culture.

(11) Correct errors of refraction with proper glasses.

(12) If you read at a table try to have a green table cover.

(13) Cover the lamp with a shade or a green cover.

ROUTINE EXAMINATION OF THE URINE FOR INDICAN.

BY JOSEPH DAY OLIN, M.D.

This paper is intended merely as a suggestion to the busy practitioner.

In the examination of a large number of specimens of urine during the past year, I was struck with the frequency of a marked reaction in the routine test made for indican. The cases were of varied nature, but the larger part of them gastro-intestinal.

It seemed to me regrettable that a condition so marked in such a large number of pathological urines was constantly passing unnoticed in the majority of instances because of the failure of physicians to make a simple, quick test. In all probability some of the important office tests of the urine now generally employed would be omitted as a routine, and often even only those made which the history, symptoms, and physical signs frankly indicated, did not their simplicity conduce to facility of investigation.

A urine may show no sign of renal trouble nor yet any marked indication of disordered metabolism, and yet be distinctly pathological. Quantitative estimations bearing on metabolic disturbances are, for the most part, impracticable for the office. Chemical tests for rarely occurring substances are often difficult and disappointing. The presence of increased indican is usually, however, both of sufficiently definite significance and of easy and prompt demonstration, adding but a minute or two to the time required for urinalysis.

Of the conjugate sulfates found in the urine, indoxyl and skatoxyl sulfates are of chief clinical importance. Though their amount is influenced by the character and quantity of the food; the formation of indol and skatol has been demonstrated to be directly dependent upon bacterial decomposition of proteids, whether or not previously modified by the action of the digestive ferments. These substances, to which, in association with hydrogen sulfid, the fæces owe their rank odor, are absorbed and subsequently oxidized (probably largely in the liver; may be also in the lungs and parenchyma of the kidneys) combine with sulfuric acid and, in a lesser degree, with glycuronic acid, and are normally excreted in small traces in the urine where they further combine with a base and occur chiefly as the protassium salts of sulfuric acid.

When, because of increased production or increased opportunity for absorption, or both, more of these bodies are taken up into the circulation, there will, provided of course, other conditions are equal and the kidneys remain competent, a proportionally large amount of their conjugate sulfates appear in the urine. Indol and skatol have been shown to owe their origin respectively to the action of specific bacteria. Practically their is never an excess of skatoxyl in the urine where there is not also an excess of indoxyl. Though rarely the former may be most pronounced, yet almost always the indoxyl is seen to predominate. So that, as a rule, we may say that indoxyl sulfate of potash, or indican, is a reliable index of the absorption of the products of intestinal putrifaction.

Among the conditions productive of indicanuria are:

I. Those where the stomach is primarily at fault:

(a) Through a decrease of hydrochloric acid secretion, as in gastritis.

(b) Through stasis of its contents more or less pronounced resulting from impaired motility or pyloric stenosis, or like cause, though the hydrochloric acid remain normal or in some cases be even increased.

(c) Gastric ulcer.

(d) Malignancy, acting by one or more of the above factors or through decomposition of the necrotic mass in advanced cases. (In certain cases of malignancy, a marked formation of lactic acid tends to retard putrifaction).

II. When, either primarily or secondarily, the intestine is at fault.

The proteid matter from which these aromatic compounds are derived is chiefly present in the small rather than the large intestine and therefore it is that in disturbances of the small intestine the larger amounts of indican are found in the urine. The excessive amount occurring in ileus constitutes a diagnostic point between stasis of the large and that of the small bowel.

In catarrh of the small intestines, even though the diarrhœa may be extreme, the excessive putrification often causes a notable indicanuria. The condition is said to be invariably present in asiatic cholera. In tubercular enteritis it is usually marked.

In peritonitis, whether traumatic or septic, indicanuria is present and varies with the amount and character of the involvement.

In typhoid fever it is a constant feature and may be of diagnostic acid. It is the rule, also in jaundice; and intestinal intoxication may contribute considerably to the toxæmia of these conditions.

Again, as in the case of the stomach, malignancy of the intestine may causes large increase of indican.

But besides the indicanuria of gastrointestinal origin, must be mentioned that from the absorption of putrifactive products from septic abscesses and particularly from empyemas and pyonephroses. Owing to the occasional obscurity of this last named condition it may also here be of cumulative value in diagnosis.

When, then, the analysis of representative specimens has shown indican in excess, and all allowance has been made for the effect of ingesta, we know that, either we have to do with a septic process, or some disturbance of the alimentary tract demands our attention.

In acute conditions the demonstration of indican may be of considerable diagnostic import, as in a differentiation between obstruction of the large and small intestine, in the former of which there is a quick and great increase in indican, in the latter rarely such a large increase except in the later stages.

A variety of symptoms such as headache, rheumatoid pains, lassitude, mental dullness, nerve fatigue, may be directly due to an intestinal intoxication evidence of which is furnished by the indican test.

Indicanuria may be the only symptom which leads to the discovery of a chronic gastritis, achylia or malignant disease.

Increase or diminution of indican may be of value in the prognosis of peritoneal affections, particularly of periappendicular inflammation.

A persistent indicanuria may explain a profound anemia. It is notable that leukaemia commences with intestinal symptoms. Indicanuria was found to aid us in explaining a case of simple anemia with hemoglobin reduced to 30 per cent; and a correction of it by diet, hygiene and eliminative measures restored the patient to comparative health though a valvular difficulty complicated the case.

The occurrence of indicanuria may be simply a warning of errors in diet, but is not therefore of less importance. In this connection be it admitted that the question of idiosyncrasy must be weighed, some persons exhibiting a considerable degree of indicanuria without marked symptoms. But the constant occurrence of indican in considerable quantity may be said to be pathological.

In cases of heightened blood pressure and sclerotic kidney, the condition of the gastrointestinal tract may have been first at fault. Albuminuria in these cases is often slight and at times absent and the quantity and specific gravity normal. The indicanuria may, however, be marked and, if detected early, lead to the proper treatment to check the sclerotic process.

Dr. Harris A. Houghton (American Medicine, Oct. 7, 1905,) reviews three interesting cases of interstitial nephritis in which the administration of intestinal antiseptics was of considerable value in reducing the blood pressure. He concludes: "When, in the course of nephritis characterised by high blood pressure, there is indican in the urine, treatment designed to lessen the amount of proteid putrifaction in the bowel will have a tendency to lower the blood pressure by preventing the absorption of substances which, although rapidly eliminated with a normal kidney are allowed to accumulate in the blood and other organs by reason of reduced kidney capacity."

The large class of neurasthenic, headachy patients, whose intestinal action is sluggish and in whom indicanuria, usually of a less marked degree, is more or less constantly present, are cases which demand every aid we can render to a weakened nervous system. In them, whatever be the starting point of their trouble (be it hereditary or otherwise), the toxemia of which the indicanuria is an indication completes a vicious circle which must be broken before there can be much improvement. I have in mind an illustrative case, one of persistent migraine of years standing, in which this was accomplished by simple means and without sedatives. The indican was the first clue to the situation.

The statement that simple constipation is not accompanied by indicanuria is not true. Indican is usually present in this class of cases, though in a less degree than in obstruction.

In an estimation of urinary indican the relation to the specific gravity must, of course, be considered. Out of 1,035 miscellaneous specimens with average specific gravity of 1020 (many of them 24-hour specimens) with which I had to do, a marked increase of indican was noted in 525 with average specific gravity of 1024.5, a slight increase in 255 with average specific gravity of 1021, while in 275 cases in which no indican or merely a normal amount was found, the average specific gravity was 1015¼. The seemingly high proportion of cases with large increase of indican is not real, as several specimens were usually examined from the patients presenting this condition. But though the indican was usually most marked in specimens of high specific gravity, it was interesting to see in different specimens from the same patient that, where the condition was ameliorated, a higher specific gravity would not bring back the indicanuria formerly noted with a lower one. Rarely a marked reaction was noted in urines with a specific gravity as low as 1008 or 1007.

Unfortunately, there is no quick way of estimating accurately the quantity of indican in the 24 hours. The qualitative tests

are, however, easy, quick and reliable, and by using always the same quantities of the urine and of the re-agents the degree of indicanuria may be watched with sufficient accuracy for careful clinical work, provided the examinations are made by the same observer or one who has worked with him.

The tests are based on the liberation of indoxyl by shaking the urine with a strong mineral acid (an equal volume of pure hydrochloric acid is usually employed), and further oxidation of the chromogen by some oxidizing agent such as chloride of lime, hydrogen peroxide or potassium permanganate till the color of indigo blue is produced, this being next extracted with chloroform. Care must be used not to carry the oxidation too far and destroy the color. Sometimes the indican is chiefly evidenced by a reddish pigment, and in these cases it is well to further employ Rosenbach's indigo-red test.

Though the presence of a considerable amount of indican may be regarded as positive evidence of the absorption of the products of putrefaction from the alimentary tract (with the exception noted above), a negative reaction gives no assurance that this condition does not exist. The function of the liver in controlling the metabolism of these substances is little understood, and the relative competency of the kidneys must always be taken into account.

The toxicity of indol has been disputed; but, though experimentation has shown it to be somewhat toxic, it is to other substances of unknown nature but of higher toxicity, which are increased and absorbed with the indol under like conditions of production, that the various symptoms of indicanuria are chiefly due.

The psychic influence upon the observer of a striking indican reaction may cause him to overestimate its significance, but when he has directed his attention carefully and persistently to the removal of the causative factors of the indicanuria, the results will, in the vast majority of cases, sufficiently demonstrate the rationality of his therapeusis.—The New York State Journal of Medicine.

ECTOPIC PREGNANCY.

By W. M. Randolph, M.D.

Ectopic pregnancy is much more frequently met with in large centers of population than in the rural districts. My own experience has been limited to a few cases, histories of which I shall give in more or less detail. The ordinary frequency of ectopic pregnancy is given variously as 1 to 500 (Hirst). In my own experience I have had one in about 300 pregnancies. One of these cases, as you will see, was abdominal—whether primary or not, I leave to your own judgment; all the other cases which I have seen have been after rupture. In only one of these was the patient under my care prior to rupture.

Historically, ectopic pregnancy dates back as far as recorded cases go. Hirst in his "Diseases of Women" credits Nufer with the first operation for this condition in 1500 A. D. In the 17th century Benedict Vassal reported one case, which was reviewed by De Graff, and Marien and Riolanus (Kelley, Textbook Obstet.). In the 18th century Boehmer differentiated the several varieties. Up to recent times abdominal pregnancy was considered the most frequent. At this time primary abdominal pregnancy is thought to be extremely rare, if it ever occurs. The old writers had no such opportunity as the men of recent times to study ectopic pregnancy; neither were their methods of investigation of sufficient exactness to clearly interpret the various forms. Since the advent of antiseptic surgery this condition has been much closely studied, and in consequence its pathology is very much better understood. It is fair to state, however, that Schmidt's addition of interstitial is practically the only variety added to Boehmer's of 1752.

The classification of ectopic pregnancy may be anatomical or clinical.

In the anatomical classification, there are tubal pregnancies, which are further divided into interstitial, in which the ovum develops in the interstitial portion of the tube—terminations of which may be by expulsions through the uterine ostium, and the possibility of continued pregnancy in the uterus an intra or extra-peritoneal rupture; of the two terminations the latter is the more frequent. The second or isthmium form of tubal pregnancy is where the ovum develops in the middle portion of the tube—the terminations of which may be intra-ligamentous or intra-peritoneal rupture, or possibly tubal abortion, though this last is rare from this portion of the tube. The third and last form of tubal pregnancy is infundibular, or ampullar, where the ovum becomes attached on the outer portion of the tube near the fimbriated extremity, and possibly in or upon the ovarian fimbriæ. This form may lead to adhesion of the fimbriæ to the ovary, to a tubo-ovarian pregnancy, or it may become tubo-abdominal, or possibly abdominal following a tubal abortion. Tubo-abdominal pregnancy may occur as the result of rupture or any of the varieties of tubal pregnancy: intra-ligamentous may result from the rupture of the tube into the broad ligament.

Primary ovarian pregnancy has been demonstrated in a number of cases. (Leopold.) Webster reports one, and others are cited in the various textbooks. Criteria for this are utero-ovarian ligament connecting sac and uterus; ovarian

tissue in various portions of sac; tubes and uterus normal. They are not difficult to establish.

The possibility of primary abdominal pregnancy is doubted by many. Numerous cases are recorded but none are founded upon what is now considered to be a careful scientific investigation of the conditions. To prove primary abdominal pregnancy one must find a gestation sac surrounded by peritoneum, independent of any connection with tubes, uterus, or ovaries. Such proof can only be had by a careful study of frozen specimens, and careful microscopic examination. Few cases have been subjected to such a study and of those which have, none have so far stood the test.

Secondary abdominal pregnancy is a well recognised condition. Many authentic cases have been reported. Tubo-abdominal, ovarian-abdominal, utero-abdominal are recognized in addition to utero-peritoneal forms. A careful study of this condition, and with aid of the microscope, will reveal decidual or placental connections with one or the other of these organs.

The clinical classification of ectopic pregnancy is very simple. The etiology of this is not clear. It is well recognized that the usual causes of the arrest and development of an ovum outside of the uterus are some change in the tubes themselves, as inflammation in the mucous membrane of the tube, and destruction of its cilia; peritoneal adhesions around the tube, interfering with the lumen of the tube; thickening of its walls; pressure without or within; diverticula as cited by Williams; persistent type of the tube, in which convolutions of the mucous membrane are well developed; or when the rudimentary horn of the uterus has no connection with the normal cavity. As demonstrated by Williams, one tube may be stenosed, and a fertilized ovum in going from the ovary on that side may develop to such an extent before reaching the tube on the opposite side as to be incapable of going through the lumen of the tube (external migration). The majority of the cases will, therefore, be found in women who have been subjects of inflammation of the tubes, or peritoneal inflammation around them.

The older men until Tait, thought that it was necessary for the ciliated epithelium to be destroyed before impregnation could occur in the tube; this theory has been exploded. It is now thought that impregnation probably occurs there. In addition to the inflammatory causes certain developmental anomalies are thought necessary. Normally, decidua occurs in the uterine mucosa after impregnation. Webster advanced the idea that only tissue that is analogous in its embryology to the uterus is capable of causing decidual reaction. It is probable that without such reaction the ovum would not develop. The tubes are the only structures under consideration other than the uterus, which are normally developed from the Mullerian ducts. If there are any remains of Mullerian tissue elsewhere than in the tubes, it is necessarily due to the embryonal inclusion of portions of Mullerian duct in the tissue in question.

Portions of the fimbriated extremity of the tube have been demonstrated by Landon and Williams in the ovum, and portions have been demonstrated also in the broad ligament, and in the pelvic peritoneum, posterior to the uterus. Accepting these findings, we can readily see why it is that tubal gestation is much more frequent than any other variety. But with this view of the matter, we must likewise admit the possibility of ovarian pregnancy and of primary abdominal pregnancy. I is true that the most usual termination, once the fertilized ovum enters the peritoneum, is the absorption of the fetal relic; this, of course, cannot occur where development has proceeded very far, nor does it prove the impossibility of development in the peritoneum. On the contrary the many secondary abdominal cases recorded prove beyond doubt that the fetus can live and develop within the peritoneal cavity. Too few cases have been subjected to the critical study now demanded by science to enable us to say such a condition cannot exist, and we will have to leave it to the future to prove or disprove the possibility of a primary abdominal gestation.

Most authorities on the subject take the view that this condition is not probable. I have slight hesitation, therefore in claiming that the case which I will now report is one of primary abdominal pregnancy.

Case I.—The patient, a woman of twenty, without children, consulted a physician in February, 1895, for cessation of the menses and slight pain in the right side of the pelvis. Examination revealed a mass in the right side, which was tender and gave the sensation of a pulsating cyst. The diagnosis of the ectopic pregnancy was made and an immediate operation advised. The patient, for reasons of her own, postponed the operation, but sometime in April of 1895 she returned for an examination. This examination revealed a centrally located tumor, which appeared to be a normal pregnancy. She was advised that the former diagnosis was an error, that the fetus was intra-uterine, and that an operation was unnecessary. Early in October she was in pseudo-labor for four days. I saw her in consultation on the third day. Her condition was such that an operation was thought useless—the fetus was dead, and the mother was dying. She died during the following night. At no time during her pregnancy did she give a history of rupture or tubal-abortion.

Autopsy revealed the sac enveloped by peritoneum; the placenta was attached over the fundus, tubes, broad ligament, and rectum, and careful manual separation failed to reveal any connection of the placenta with the inside of the tubes, ovaries, or uterus. Both tubes and ovaries were normal, the uterus was slightly enlarged with more or less patulous os It was impossible to have any microscopic examination made, and it was manifestly impossible to study frozen sections. Consequently, the case is not made out according to present criteria.

Cases of abdominal pregnancy have been reported by various authors. Schlechtendahl reports a case where a sac found near the spleen contained a fœtus 15 c m. long. In this case both the tubes and ovaries were normal. Braum and Zwiefel report a case in which the placenta was attached to the sigmoid flexure and posterior uterine wall. Nothing was said about the condition of the adnexa. Koerberle reports a case of impregnation through a vagino-abdominal fistula after hysterectomy. This case was probably tubal in origin. Luck reports a case of a sac embedded in peritoneum of Douglas' cul-de-sac. Whitthauer reports a case in which he found a small clot containing chorionic villi, wrapped up in omentum. This had ruptured through the omentum, as the cavity was pretty well filled with clot. No fetus found. A. L. Galabin (Brit. Med. Jour., March 23, 1903) reports a case of a sac being found in Douglas' pouch—the fetus being about four months old. The tubes and ovaries were both normal and the nearest point of placental attachment to either ovary or tube was about two c.m. Guittierrez reports a case of a multipara, aged 34; in April and May, 1902, there were no periods; in June she miscarried, and thereafter there were several months of amenorrhea, during which normal pregnancy was believed to exist. In April, 1903, eclampsia developed; uterine contractions were left, and felt movements which previously had been active ceased. The patient recovered and afterwards the breasts and the abdominal swelling diminished in size. Menstruation occurred in May and each month thereafter. In July Guitterrez found a round swelling as large as an eight month's pregnancy, smooth, elastic and very slightly movable. In November, 1903, an abdominal incision was made. The tumor was partly covered by omentum and adherent to the anterior wall. Many other adhesions were present. There was a sort of pedicle attaching the tumor to the right side of the pelvis. During the manipulations the tumor ruptured and a female fetus, somewhat macerated, escaped. The genital organs were found to be healthy. Both tubes were permeable; the ovaries were slightly cystic. The placenta appeared to be planted on the great omentum. The inner wall of the cyst was lined with amnion, the former being degenerated in parts. The chorion was also considerably altered. This case is cited by Webster, who says that such a case undoubtedly appears to be one in which a fecundated ovum began its development outside the genital organs. In view of these cases, some of which perhaps might stand scientific investigation, we cannot well doubt the possibility of primary abdominal pregnancy.

The symptoms of ectopic pregnancy are, briefly—history of antecedent sterility in a woman between twenty and thirty. It is generally the case that she has had one or more normal pregnancies, though it is fairly frequent in nullipara. She gives a history, perhaps, of some menstrual disorder; period being delayed from a few days to several weeks. When menstruation appears the flow is frequently profuse, painful and intermittent; careful examination will reveal portions of decidua. Pain is a constant symptom, both before and during the flow, which probably takes place on the death or rupture of the gestation sac; during the flow there is frequently so much pain that the diagnosis of uterine abortion is made, and a curettage performed.

We must not forget the possibility of having an intra uterine as well as an extra-uterine pregnancy at the same time. Where the symptoms are not cleared up after the curettage with delivery of well defined fetal relics, we should look further for the source of trouble; indeed, a careful examination at the time of the curettage should reveal the intra-abdominal condition. In most cases a careful examination of the pelvis and of the uterine discharge will differentiate between a normal uterine pregnancy and an ectopic gestation. A decidual development in the uterus during the growth of the ovum is the rule, and, at its rupture or death, is discharged from that organ in various stages of preservation, constituting a considerable portion of the flow. Colicky pain is present from the beginning of gestation, due probably in part to the development in the tube, the stretching of its fibres and to small hemorrhages, which occur prior to rupture. (Harris.) Contractions of the tubal muscle also play a part in the production of the pain. The uncertain signs of pregnancy are by no means constantly present, though they may be well marked. Physical examination at this time reveals a painful, pulsating tumor of cystic character in one or the other tube; more or less softening of the cervix, and perhaps slight enlargement of the uterus, which may be displaced to one side or the other, or anteriorly. Softening of this organ is not a constant sign. The usual terminations of ectopic pregnancy are important; they are stated in detail in all books dealing with this subject and it is hardly necessary for us to go very fully into the subject.

The most important is the rupture of the gestation sac with an expulsion of its contents, along with more or less blood, endangering the woman's life or health. Rupture may occur into the abdominal cavity, giving rise to symptoms of profound shock, or it may be between the folds of the broad ligament, in which case the symptoms are less severe, unless the possible secondary rupture becomes tubal.

The time at which the rupture occurs is important as regards the patient's life. The earlier in the life of the fetus it occurs the less serious the symptoms are likely to be. It frequently occurs at this point, though not constantly. Sometimes there is a gradual outpouring of blood through the abdominal ostium without complete separation of the ovum from the tube; this flows into the peritoneal cavity, gradually forming hematocele. It may be intermittent, but frequent repetition endangers the patient's life. However rupture occurs, it leads to the formation of hematocele, the presence of this condition giving us some of the characteristic signs by which the condition may be recognized. The ovum may continue to develop but more frequently its growth ceases, and absorption of the entire mass may occur, if the patient is fortunate enough to recover and if the fetus is not too well developed. If development has gone beyond the tenth week, it is probable that there will be more or less encysting of the fetus in the cavity, or perhaps suppuration may occur, leading to a pelvic abscess, and eventually, if the condition is not properly treated, to a general peritonitis. Where the development has proceeded to term, and the fetus has died and the mother lives, further changes occur, such as lithopodion or adipocere.

After rupture the symptoms which present themselves depend upon the direction of the rupture. There is always acute pain in the affected region, accompanied by shock, syncope, and more or less collapse, depending upon the amount of blood lost, and the rapidity of such loss; the pulse becomes rapid and feeble; the respiration sighing; the temperature perhaps is subnormal. If the rupture is intra-abdominal the shock is extreme, and may be fatal in a few hours, whereas, if it is intra-ligamentary, it may not be at all severe.

The diagnosis of ectopic pregnancy before rupture is extremely important, though not always easy. If it has not been made before rupture, it is necessary to recognize symptoms of rupture. The history, if carefully reviewed, draws attention strongly toward ectopic gestation occurring in multipara, sometime after the birth of the last child, with a cessation of menses, this history, with a careful physical examination, should enable us to make a diagnosis in most cases. After rupture the chief symptom other than the acute pain and shock is rapidly developing anemia. Couple this history with a bi-manual examination, and it ought to be simple to make a diagnosis. We must, of course, differentiate pregnancy in the bi-corn uterus; and we must not mistake a fibroid for a pregnancy. Ovarian tumors and tubal inflammations may be troublesome, but are usually accompanied by excessive, regular menstruation.

The older gynæcologists recognized that the treatment of ectopic pregnancy was difficult. The mortality is given at from 17 to 40 per cent. They sought to avoid operation, and used, if an early diagnosis was made, electricity to destroy the ovum. After the death of the ovum, operation was less serious. At the present day, however, only operative measures are advocated. If prior to rupture, the operation ought to be safe. After rupture the dangers are much greater. It will be necessary to exercise judgment and not operate during profound collapse, unless we believe the hemorrhage is still going on. If it has ceased, rest in bed, with foot elevated, and opium in some form will be indicted until moderate reaction has occurred. Late in pregnancy many authorities advise to await the death of the fœtus, as it is thought to be safer for the mother. My case does not encourage this view. A better method would be to remove the fœtus and leave the placenta unless its attachments offered little trouble in its removal. Hemorrhage is severe and difficult of control, if immediate separation is done. Drainage is, of course, necessary. Soon after rupture a careful peritoneal toilet can be made and results will be more satisfactory than later. If the rupture has occurred some months before, I have thought it best to drain; clots are difficult to get entirely, infection is easy and peritonitis might follow. Both our patiente did well with this line of procedure. The work has to be done rapidly, but should nevertheless be thorough. Our plan of operation has been to open abdomen quickly, investigate the pelvic condition, securing the bleeding points, at once.

If the patient's conditon demands it, intravenous or subcutaneous saline and adrenalin should be given. Any necessary work can now be done with very little added shock. Do not give saline till hemorrhage is controlled and do not prolong unduly the exposure of the viscera to air Keep the patient warm during and after the operation and insist upon perfect quiet afterwards; elevation of the foot of the bed is useful. The after treatment is essentially that for other celiotomies, it being more necessary to give blood producing food and tonics.

Case 2.—R. B., July 12, 1896, colored, 30, six children. Period one week over due. No examination. Lifted tube. Sharp pain in right side. Shock slight—operation one week

later. Hematoma covered by intestines adherent. Rupture of right rudimentary horn. Hysterectomy. Recovered.

Case 3.—E. R., June 6, 1907, colored, well into two months. Menstruation history negative; two para; sudden sharp pain lower left abdomen; been in bed since. Mass in cul-de-sac Douglas. Impression of pelvic abscess which was diagnosed, Colpotomy June 8th followed by discharge, old clots which led to diagnosis extra-uterine. Celiotomy revealed ruptured left tube. Intra-peritoneal; clots found wrapped in omentum; pelvis filled. Peritoneal toilet carefully made; drainage; did well for four weeks; nausea and vomiting till death on forty-fourth day. There was no distention, nor was there any constipation—the bowels moving every day.

Case 4.—B. C., aged 20, July 17, 1907. Nullipara colored; menstrual period five days over due; sharp pain in abdomen morning of 16th. Did not work; syncopal attacks; nausea; uterine discharge I saw her morning of 19th; examination revealed hematocele in Douglas pouch, in left illiac region extending above pelvic brim. Tenderness. Diagnosis—ruptured tubal pregnancy. Blood examination, 23,800 leuco., 2,160,000 reds, 84 per cent. polynuclear leucocytes. Operation—clots turned out, left kidney pouch cleansed; closed. Left hospital on fourteenth day.

Case 5.—C. J., colored, about 28, two para. No history obtainable except pain for two months. Tumor in right iliac; suspected ectopic. Operation—hematoma in right broad ligament. No free peritoneal blood. Hemorrhage sharp while separating tumor. Quickly controlled. Vessels tied and tumor removed Fetus about four inches long. Other tube and ovary normal. Drainage; there was some severe pain after operation, but she was able to leave the hospital August 15th, twenty-four days after operation.

The conclusions reached by my study of this subject are:

I Primary abdominal pregnancy is possible, but not probable.

II. Primary tubal pregnancy is far the most usual form.

III. Intra-peritoneal rupture is not necessarily fatal; though more likely to prove so than extra-peritoneal.

IV. The only blood finding of importance is rapidly developing anemia, other findings being equally suggestive of suppuration.

V. The only rational treatment is surgical and this, to get the best results, should be prior to rupture. Failing this, it should be done as soon as the patient's conditions and surrounding permit.—The Virginia Medical Semi-monthly.

NEURASTHENIA OR NERVOUS EXHAUSTION.*

By John D. Bonnar, M.D.

In approaching the discussion of this subject, we are confronted with its unlimited area of operation and its wide diversity of causes. On the other hand, its ways of manifesting its existence in individual cases are about equally limitless—depending, as they do, upon age, location, idiosyncracy and co-existing diseases, or disturbances of the normal functions. Such character at once distinguishes the ailment while rendering the complete diagnosis rather indefinite; therefore, with our present knowledge of the subject, it becomes us to deal cautiously in making our views known to the patient, while carefully weighing all the co-related features and, by processes of elimination and deduction, arrive at a decision.

It is a well-accepted principle of practice, that, where many remedies are prescribed for any disease, its true nature or its special remedy remains unknown. Likewise where vast and widely differing causes appear to produce the same general result, there is yet an obscurity as to the real pathology. Such we regret to admit is the case in neurasthenia. Nevertheless its known existence as a member of the morbid affections which afflict man, gives it classification amongst the more usual diseases.

That it is a "condition" rather than a specific entity I feel justified in believing; yet, with our limited proof, we must await later investigation to verify such view.

In this day of germ theory of disease, we have grown rather skeptical about pathological states, except in so far as may reasonably be produced by the destructive germ influence. The time has gone by when we can loosely ascribe to chill or atmospheric states, or even heredity, the role of honor as causative forces in precipitating a sickness. We now look for some culprit, in the form of bacillus or germ. When we have isolated the venal force, we thereupon proceed to seek its antitoxin. Thus the materialistic has supplanted the more or less ill-defined influences which held the stage in the older school. But influences are yet such vital forces, we must carefully weigh them and often decide whether such are not even now worthy of being ascribed the prior place in producing morbid states that predispose to the growth of the germ. While thus casually delineating some of the preconceptions which arise out of the study of this quite prevalent sickness, I shall now place before your attention the picture of Neurasthenia or Nervous Prostration, as commonly met in our practice.

* Read before the Eighth District Branch of the Medical Society of the State of New York at Buffalo, September 26, 1907.

Weakness, not attributable to any well-known cause, is the most salient symptom. The history of each case, however, will usually reveal the existence of some excess, psychic or physical, thence we are guided, in eliciting the history in the individual case, following, from cause to effect, each line of morbid force that is revealed, till the full array of facts are in mental revision, then relation as primary, secondary or later-morbid factors. Thus the sum of abnormal discords are voiced by this vital instrument of human instincts, emotions and ambitions. Small wonder if our point of view changes quickly when mind and body, as causative forces, alternately take the lead.

The patient is irritable and easily excited, but soon exhausted, leaving a feeling of apathy. He suffers from exhaustion, fear and inability to make decisions. Inconstancy is also a marked feature, but intellectual capacity is not materially lessened, yet patient forgets easily.

Spontaneous mental acts are lessened, visual memory-pictures lessened, power to think lessened, yet subject to habit of introspection to a morbid degree.

Subjective symptoms are headache, vertigo, sleeplessness, fear of sickness, nosophobia, often combined with hypochondria.

Some of the simple symptoms are also combined with this same despondency. Lead-cap headache is a special feature, while insomnia is often so persistent as to dominate the clinical picture. Pavor nocturnus is often a troublesome feature, particularly with children, who suffer with frightful nightmares. Nyctalgias are often of such distressing nature that patients are nightly tormented with doubtful pains in the epigastrium. In other instances the pain is felt beneath the sternum. Special senses also manifest the existence of some abnormal influence.

Such is due to its effect upon the motor nerve supply, rather than the nerve of special sense, for, while sight and hearing are not weakened, there is a distinct debility manifested in the muscles of the eye, supplied by the third pair of cranial nerves, which give motor power thereto.

Athenopia is a condition of neurasthenia brought about by eye strains, as from hyperopia or astigmatism, or muscle unbalance. Again we find, when the patient attempts to stand, with the eyes closed, a tremor of the eye lids occurs—fibrillary tremor of the orbicularis palpebrarum. Orbicularis oris tremor is also noticed.

Motor disorders manifest themselves in weakness, tremor and slight fatigue, but never increase to paralysis, are always general and not confined to one nerve area, never combined with atrophy, nor with alterations in the electric excitability. While tremor is a frequent symptom, it is of the rapid vibratory nature and of small amplitude.

Slight degrees are also found in healthy persons after smoking, venery or drinking, and also from psychic excitement. Deep reflexes are generally increased, especially of the knee reflexes. Foot clonus is occasionally observed, also increase in the mechanical and nerve excitability.

Whenever the knee reflexes are wholly absent, organic nervous disease is liable to be present. Stuttering and mutism, particularly during school hours, are found among children suffering from overstudy, or lack of proper rest and sleep. Fear is also a strong factor in such cases, and Hippus is also not a rare symptom with children.

Neuralgia, while not often found, sometimes occurs as an hemicrania, in neurasthenic patients. Parasthesias, formications and a feeling of coldness, more usually of the feet, but also of the hands, or in the region of the quadriceps extensor femoris muscle, are symptoms—the latter occurring from some sudden shock or fear. Pruritis ani or vulvæ are quite common occurrences—heredity, in this respect, was markedly shown in a cited lineage of mother and three daughters, all having the same pruritis ani et vulvæ at age of thirty years——possibly only co-incidental, yet of sufficient interest to be related by Mayer on "Diseases of Nervous System," as given by Oppenheim. Another sister had a general alopecia—a neurasthenic sequence. Urticaria of a neurasthenic type is found.

Vasomotor disturbances, as erythrobia—morbid flushing—may be very stubborn. A naurasthenic form of intermittent limping is seen. Heart disturbances are closely allied to these vasomotor influences arising from this disease

Paresthesias, resembling angina pectoris, occur. Psychic excitement, or coffee or diet may readily increase the pulse, out of proportion with their normal effect.

Tachycardia, as though the heart would stop, I have seen in some well-marked cases of this sickness. Impotence, in male patients, occurs relatively often, which gives rise to our careful enquiry into personal habits—genital and convivial. While bladder disturbances are seldom, seminal losses are quite liable, where debility becomes marked.

Digestive disorders are also frequent—particularly hyperacidity of gastric juice and occasionally severe pain.

Constipation is frequent—may be in the nature of a cause.

Nervous hepatic colic occurs in some (Furbringer), but its diagnosis, as being due to neurasthenia, would depend largely upon the absence of icterus, swelling of the liver and absence

of other neurasthenic symptoms, yet the chronic cases of these liver ailments may cause, in part at least, the neurasthenic state. Salivation and also an abnormal dryness of the mouth, are experienced Albuminuria is also found as sequence to psychic excitement, also oxaluria, while general nutrition need not suffer in the slightest.

Increased tendon reflexes, increased excitability of sensory and, to a lesser degree, also of motor nerves are present, while the cardiac nervous system evinces, in many cases, abnormal excitability. We are thus led to yield to Bouveret's contention that this is a disease of the nervous system.

This contention is strengthened somewhat by the fact that in chronic intoxication, allied in his characteristics to neurasthenia, Nissel's method has shown minute alterations in the ganglionic cells, but in this neurasthenic disease the alterations are so minute, our present methods cannot detect them. The anatomic basis being in doubt, we cannot properly speak of neurasthenia as being a material disease of the nervous system. It tends to take a chronic course, increasing gradatum. A certain periodicity is also found.

Having thus briefly outlined the symptomatology, let us now observe the states, conditions, or influences, which act as causes. Its common occurrences to-day suggest its origin in the "strenuous" life of our people and thus affords an insight into its essential nature. For this let us be thankful. As already noted, neurasthenia is a disease of very common occurrence. Both sexes are afflicted, but, in its pure type, it is more frequently found in men than women—the latter suffering more frequently from hysteria.

Such authors as Osler, of Oxford, and Charcot and his pupil, Ellis, all corroborate the view that between these two diseases—neurasthenia and hysteria—there is a close relationship. In fact they go so far as to regard the hysteria in the nature of a resultant to that debility brought about by the morbid train of ills, developed in what is denominated nervous prostration or neurasthenia.

Dr. Austin Flint gives as causes of hysteria, "sudden disappointment, mental anxiety, prostration, violent anger," and, as causes of neurasthenia, "long continued anxiety, or inquietude, increased by other causes, which tend to diminish the vigor of the body, with respect to the hours of sleep and rest." This, you will observe, is a most striking similarity in the symptoms of the two diseases.

Charcot gives, as the direct cause of hysteria, causes that act by causing derangement, particularly of nutrition, of the nervous system. That loss of insensibility, in hysteria, shows evidence of nerve exhaustion, in the centers of nerve sensation, are theories advocated by such noted authors as Sollier and Ferra, while Gilles de la Tourette believes that hysteria is largely due to desire for simple affection. With the latter exception, we must admit the peculiar and striking similarity of these affections and some sameness in their pathology.

In fact, the contention of Charcot is that hysteria is due to a derangement of the general nutrition of the nervous system. This is also admitted to be the most marked condition in neurasthenia, hence their differentiation, to say the least, becomes complicated by such weight of authority.

Having thus cursorily shown the relationship of the causes in neurasthenia and hysteria, in major features, I will not weary you with further comparisons, but recite still a few more of the marked sources from which this prostration of energy springs Middle life is the most fruitful period; hereditary predisposition has marked effect where exciting causes supervene. Neurapathic predisposition is likewise a favoring forerunner; congenital weakness of system, particularly of the nerves. Psychic and physical degenerative stigmata are associate causes. Toxicological taint, as from alcoholism of parents, may lay the foundation; emotional nature is also an important etiological factor.

Prolonged psychic excitement, mental overwork, night working and over-heated rooms, also all moments that weaken the organism, loss of blood, and fevers are potent causes of this complaint. Toxines, while a factor, are not a frequent cause. Debility of genital powers and defective hearing or loss of smell provoke the onset.

Those afflicted with persistent scoliosis are frequent subjects. It may be of toxic origin, as from chronic alcoholism, nicotine, lead or arsenic. Syphilis is also a fruitful cause. Autotoxic source is not well established, yet finds a supporter in Bouchard. Sexual disorders, especially abuse and Onanism, or interrupted conjugal life, lay the foundation in many cases. Cephalic injuries and shocks, particularly when combined with psychic excitement, as in railway accidents, are a fruitful cause.

Diagnosis.—Neurasthenia must always be diagnosed by exclusion. First satisfy yourself that no organic trouble exists. Phthysis, diabetes, a hidden carcinoma, or uric acid diathesis may induce symptoms resembling neurasthenia, and must be carefully sought, and, if not found, eliminated.

Hypertrophy and heart murmurs are never of the functional character, so, if existing in case of weakness, the nature of such weakness must be sought out in other causes than neurasthenia.

Acceleration of pulse in neurasthania is more of an emotional source, and is due to vasomotor disturbances. In organic heart affections, such as stenosis, respiration is of dispnœic character and retarded, not quickened, as in neurasthenia. While organic heart disease may itself cause neurasthenia, we must, however, take the general symptoms into account in forming our diagnosis. We should carefully consider the points of resemblance in neurasthenia and such diseases as dementia paralytica, disseminated sclerosis and cerebral tumor, but the differentiation will be shown in the history and lack of mechanical and electrical excitation.

Melancholia, paranoia and nervous conditions, due to some exhaustion, not of a general nature, are readily eliminated from the field of doubt. This, however, is not so in some border-line cases of hypochondriasis and some of hysteria, which either complicate the neurasthenia or are, per se, the sickness.

In neurasthenia there are no spasms, while paralyses of the special senses, as are found in hysteria and in both diseases, are seen occasionally in the same subject. I found both, of singular intensity, in a lady patient recently. She suffered extreme prostration from conjugal abuses and emotional shocks, till, wholly wrecked, she fell into an hysterical and neurasthenic state—only dispelled by the removal of these cause.

The prognosis depends largely upon the cause—that from emotional, excessive mental or excessive physical work being the best.

The treatment must depend in each case upon the nature and severity, hence there are no hard and fast rules by which we can prescribe for the sickness.

Rest, in cases of great debility, may be imperatively needed, while in incipient cases, quite active physical exercise would be equally good; hence we must determine the special as well as the more general phases of each case. Some patients will show signs of anemia, and for such iron, manganese and beef are indicated, while nerve depression suggests nux, and cold extremities, arsenic, iron and general tonics, together with properly regulated exercise.

In all, such food as will be readily assimilated without any likelihood of leaving much residuum to cause fermentation, is indicated. Establish confidence of patient in his recovery, treat any special diseases which are manifested, such as hepatic torpor, lythemic condition, syphilitic taint, all wastes of whatever nature found in patient, then take up the general treatment of the case.

Before considering removal of primary cause, we must determine whether any immediate demand exists for checking effects produced. Having thus circumscribed the case with such temporising expedients, we are in position to adopt constitutional remedies, amongst which I would name hydrotherapy. Cold rubs at a temperature of 77 degrees are good, and well borne. Cold sits baths are also useful. Galvanisation of head and back is of much help in some chronic cases, so also are electric baths. Massage is also most useful where active bodily exercise is unsuited. Change of surroundings is often the one thing needed to restore sleep and hope in recovery.

Insomnia if persistent, may be relieved by bromides, or, in case of their failure, paraldehyde, sulfonal or trional, or an alternation of these may be given in doses of from one to two grams, yet never persisted in for any length of time, only till normal actions return, or where ineffectual other means are adopted. The rest treatment of Dr. Weir Mitchel, followed by liberal feeding, is much favored.

Too much treatment is liable to create in the mind of your patient an impression of the great seriousness of the sickness, hence, while keeping careful watch of every condition, such should not be made the subject of comment to the patient. A rational way of living and removal of all special causes as far as possible, and avoidance of their repetition, will, in absence of any organic disease, afford most hopeful prospect of permanent cure.

Observations and Inferences.—In the pure type of this disease, we find the nervous system is its particular seat of action; manifestations of special derangement of the organs, being usually traceable to the nerve action thereon. This occasions enquiry as to the way this is brought about. The cerebro-spinal and sympathetic (organic or vegetative) systems of nerves, while differing in their functions, are, however, intimately related in the workings of the animal economy. While the cerebro-spinal, by its dual nature of motor and sensory powers presides over the special senses and the motion and feeling of our bodies, they also send fibres to join with the sympathetic system which forms a double chain of ganglia connected by nerve trunks into one complete circuit within the great cavities of the body.

In normal conditions, the functions of our body are automatically performed. The sympathetic system, through its ganglia and its terminal nerves of distribution on the surface and in the texture of each organ following the vascular ramifications, keeps each organ in regular line of duty. The spinal nerve filaments which join this system at the ganglia on either side of the spine are found to send their filaments in company with the fine terminal fibres of the organic nerves. Whatever

disturbs or acts upon one system of nerves will, when extreme or of long duration, make itself manifest in the other. The peculiar analogy between the nervous system and an electric battery, gives us basis of deduction that would not occur in absence thereof. The electric fluid of the battery has its similar in what is denominated "neuricity," while the central cells, with their dendrites, are in the nature of a battery, the axiones being the wires. Now, if we should carry out the analogy fully, we should be led to see that anything that occasioned a waste is comparable to the short-circuiting or grounding, so to speak, of the electrical circuit. Hence disease or injury from physical or psychic shocks which draw heavily upon our powers of resistance, could in time deplete from the supply of nerve fluid so as to reduce to debility the whole system. Again it has been proved that nicotine applied to the pre-ganglionic fibres, or when injected in sufficient amount, paralyzes the action of the organs supplied therefrom. Cutting of such nerve root also paralyses the organs; hence we infer, that whatever depresses the cerebro-spinal system will finally debilitate the functions of such organs, supplied thereby. Irritation of the sympathetic causes contraction of the arterioles and capillaries and, as in case of the nerve supply to the eye, we find that the irritation of the sympathetic in the neck will produce an enlargement of the pupil, but a complete severance of the nerve will produce a contrary effect, showing that the dilator muscle of the iris is supplied by the sympathetic nerve. Hence we see that anything that disturbs the normal workings of this system, produces organic changes. Therefore we are warranted in concluding that mental, moral, emotional, traumatic or toxic influences, while borne for a time will, if continued, reduce below normal efficiency the working of the whole system—neurasthenia supervening.

Flushings are due to temporary suspension of organic nerve influence in the vasomotor system. Internal congestions and inflammations are simply more extreme stages of this suspension of sympathetic nerve control over the blood supply of an organ or texture of a body. Chills of the surface to-day, making themselve manifest on the morrow in internal congestions, are at first resisted by the defensive force of sympathetic nerve control over the internal circulation. But when tired in this defensive act, the weakened powers of the nerves yield to the pressure of blood, then internal congestion, or possibly an inflammation, may result. Toxines, psychic or physical influences, which lower the tone of one or more parts of the body, must obviously tend to weaken the organic nerve control of such, thus inducing disease therein and acting as an avenue of escape of neuricity. Similarly any such morbid forces will likewise disturb the normal formation of the enzymes or catalytic ferments in completing the end products of digestion.

Thus the enzymes are changed in their nature and action by feeling the force of such physical or psychic shocks.

When the opsonic index is superseded by the morbid wave, debility or disease, or both, may result. It may be neurasthenia simply, or it may be such with complications precedent, synchronous or sequent.—THE NEW YORK STATE JOURNAL OF MEDICINE.

THE DIFFERENTIAL DIAGNOSIS OF SURGICAL LESIONS IN THE UPPER ABDOMEN.

By J. NORBERT BAKER, B.A., M.D.

The veil of uncertainty—not to say, ofttimes, of mystery, which enshrouds lesions in the upper abdominal zone, serves as a powerful stimulus to a more careful and detailed study of the physical signs, the symptoms and the history of each individual case.

Much thought, much writing and much experimental work has been done, with a result, which is highly gratifying; for in no branch of surgery has the field been more clarified and simplified than in this one.

At the outset, in considering this subject, let it be remembered that no elaborate laboratory outfit is necessary or even desirable, a few of the simpler devices sufficing It is the clinician, who carefully develops the history of his case and who displays sound judgment and coherent reasoning in arranging the points elicited—here including from the train of symptoms points apparently rival; there eliminating, what, on the surface may seem important, yet plays no part in arriving at the proper deductions—he it is, who most often will make the most accurate and most satisfactory diagnoses.

Crowded into a very small area—an area which on the external surface of the abdomen may be represented by a circle, whose radius does not exceed an inch and a half or two inches—are the organs which the surgeon has to bear in mind, when making a diagnosis in this region—viz., the gall bladder and its ducts, the pylorus and the pyloric end of the stomach, the first portion of the duodenum, the head of the pancreas, and the upper pole of the right kidney. Behind these is the solar plexus of nerves, which has not inaptly been termed "the abdominal brain," and to which is referred, primarily, irritation of the peritoneum arising in any portion of the abdominal cavity; as for instance, the first storms of an acute appendicitis or an inflamed Meckel's diverticulum, are first registered at

this point. Or, to borrow from Treves—"there are certain symptoms common to all disorders within the abdomen at the outset in which a sudden and violent impression is made upon the great nerve centres."

Not only must the organs above mentioned, which are so closely related anatomically, be always considered, but others, while more remotely located, owing to the community of symptoms displayed by every abdominal organ, have to be considered and scrupulously eliminated; such as appendicitis, intestinal obstruction, twisted ovarian pedicle, and the like.

In order to simplify and abbreviate as much as possible, let us take up each symptom separately, and see wherein they agree and wherein they differ, when affecting the various organ under consideration.

First. Pain.—When called upon to interpret pain of the upper abdomen we have to hold in mind, first of all, lesions of the gall bladder; second, ulcer and cancer of the stomach; third, ulcer of the duodenum; fourth, appendicitis; fifth, kidney stone; sixth, pancreatitis, and last, but not least, the pain of a pleurisy or an intercostal neuralgia.

The pain of gall stones, when typical, is of sudden and violent onset, coming on most frequently from four to six hours after eating and often at night, referred to the stomach and extending ofttimes directly back to the right subscapular region being described by the sufferer as sharp, stabbing, or lancinating. Not infrequently the radiation will be to the right, or upward, with a full, bursting sensation accompanied by more or less dyspnea, due to the spasm of the diaphragm. This is the referred pain. The localised pain may be of a dull, aching type, or of a more acute, intolerable type, depending largely upon the intensity and extent of the infection and inflammation. This localised pain persists for a variable extent of time after the spasmodic attack has ceased. Von Leube considers this tenderness of the lower margin of the liver and of the gall bladder as one of the most valuable differential diagnostic points and in its absence is inclined to leave the diagnosis in suspense until more trustworthy criteria become evident. Where there has been much infection in the gall-bladder, I have seldom seen this sign fail.

This hypersensitiveness is best elicited by forcibly hooking the fingers under the margin of the right costal arch over the gall bladder region and instructing the patient first, to forcibly inspire and then expire; as the diaphragm forces the liver down, the impingement of the sensitive gall bladder against the examining fingers, suddenly cuts off the inspiration.

Further, a gall bladder, which has once become so markedly infected as to produce a localised peritonitis of more or less severity—which fact is elicited by the history of persistent tenderness, temperature, and possibly rigors and sweats has most certainly drawn to itself, by adhesions, the omentum, stomach, or other portion of the digestive tube. When such a condition exists, there follows a train of vague digestive disturbances, which, on the surface, tend to incriminate to the stomach and the patient pictures himself as being a sufferer of chronic indigestion. Only by delving carefully into the past history of such a case, possibly reaching back many years for the starting point of the initial trouble, can a proper valuation be given to these symptoms and the organ really at fault be located.

Lastly, in an acute attack of gall stone colic the disappearance of the pain is almost as precipitate as its appearance, and often there is an immediate return to health.

The pain of gastric ulcer may be sudden, sharp and severe, and is most frequently localised in the region of the pylorus; the radiation is not so marked, and is most often downward or straight backward to the left sub-scapular region. This dorsal point of tenderness is emphasized by Boas. The position of posterior tenderness is located at the level and to the left of the tenth to the twelfth dorsal vertebræ. This point has added weight when it is remembered that it does not exist in any other disease of the stomach or liver. As a rule, the pain has decided relation to meals, coming on a short time after food ingestion.

Following in the wake of a healed gastric ulcer, more paticularly if it has been located of the pylorus so as to produce more or less obstruction and consequent gastric stagnation, will be found a host of digestive disturbances resembling closely those produced by adhesions resulting from gall bladder disease. A differentiation in such cases is exceedingly difficult, and our best guide is the clinical history presented.

The pain of gastric cancer is not characteristic and is not trustworthy; it is not of a radiating character unless there is serious involvement and it is not paroxysmal. Food ingestion usually augments the pain, coming on soon after meals. While pain, of a vague and indefinable nature, is nearly always present, it is not unlike that of chronic gastric catarrh, and too great reliance must not be placed in it.

The pain of duodenal ulcer may likewise be sudden and severe and, like the gastric ulcer, rarely radiates beyond the gastric or duodenal arena. Posterior tenderness can seldom be demonstrated. As a rule, the pain presents a decided relationship to meals; at first the taking of food gives relief, pain appearing from three to six hours later, when the stomach should be nearly or quite empty; the pain is due, not to the

passage of food over the ulcerated area, but to the action of the acid chyme delivered from the stomach; the intensity of the pain and the degree of gastric acidity appear to run almost parallel.

The pain of acute appendicitis is sudden and sharp; manifests no particular relation to meals and may radiate in any or all directions. The point of maximum tenderness is most usually McBurney's point; although there may be many exceptions to this, dependent upon the position of the appendix which is prone to make many departures from the normal—sometimes being found posterior to the ascending colon and reaching as far as the liver. In such an unusual location, pain, if relied upon as a diagnostic point, would lead us into gross error.

The pain of acute pancreatitis is sudden and very sharp; there is little or no tendency to radiation, being located just above the umbilicus; there is no relation to the taking of food, and the pain and prostration simulate those of acute perforative peritonitis.

The pain of kidney stone, resembles in character that of gall stone colic in its violence and severity. Starting in the flank of the affected side it radiates downward along the ureter to the testicle and inner side of the thigh. It has no relation to meal; its termination is as sudden as the onset.

The pain of a pleurisy, involving the lower lobe of the lung or the diaphragm may mimic closely any of the abdominal lesions mentioned. A careful physical examination of the chest should set us aright and should always be made as a routine procedure.

Nausea and Vomiting.—In gall stones these symptoms are frequent and are responsible for the heavy burden imposed on the stomach in making a differential diagnosis. The vomiting may be violent and persistent, usually lasting not more than one to several hours, and, as a rule, is not protracted. The vomitus shows nothing diagnostic.

In gastric ulcer, vomiting occurs at various periods in the history of the ulcer. It usually comes on soon after meals—from half an hour to one hour—and shows, most often, an increased amount of free hydrochloric acid. The vomitus, in about fifty per cent. of cases, will show at some stage of the ulcer, blood in microscopic quantities; in some instances it may be slight, and of either bright red or of a dark color; coffee-ground vomit rarely occurs in gastric ulcer. The bleeding, however, may be latent—the so-called occult bleeding—for the detection of which the Webber test is employed. Yet in gastric ulcer we should no more wait for hemorrhage in order to make the diagnosis than we should delay the diagnosis in gall bladder disease awaiting the appearance of jaundice.

In gastric cancer, nausea and vomiting play an important role. If the cardiac end be implicated—which is comparatively rare—the vomiting comes on immediately after food ingestion and is small in quantity; if in the pyloric end—the most usual site—vomiting may be delayed one to three hours. As the case progresses and the pylorus becomes obstructed, the vomitus assumes the features of dilatation and stagnation. It may be an almost daily symptom or it may occur at prolonged intervals. The vomiting of blood is a fairly constant symptom; while sometimes so profuse as to be dignified by the term hemorrhage, yet most often it takes place as a slow oozing, which, when intermixed with the gastric juices, gives the so-called coffee-ground vomitus. The persistent total absence of free hydro-chloric acid is a valuable sign, especially in one who has passed the meridian of life; yet it is not pathognomonic and too great stress must not be attached to it.

In duodenal ulcer, vomiting is a prominent sympton, coming on, as a rule, several hours after the taking of food. Hyperacidity is also the rule, though generally not so marked as in gastric ulcer; gas formation is also a prominent feature, often producing great distress by frequent eructations. The vomitus may contain blood, but this is not so constant as in gastric ulcer or cancer. Intestinal hemorrhage is more common than in other conditions, and the occurrence of a sudden intestinal hemorrhage with gastralgic attacks is very suggestive of duodenal ulcer.

The physical signs, obtained in these various lesions are also important. They should be taken up in the routine order—inspection, palpation, percussion and auscultatory percussion. The time allotted this paper will not permit of a detailed comparison of the signs presented by the various lesions under discussion. After each procedure has been gone through, the patient's stomach should be inflated either with a stomach tube and a Davidson's syringe, or by means of a Seidlitz powder, each part being given separately. By this means, important information can be gotten as to the dimensions of the stomach and the more exact relation of any existing tumor to the other parts of this region.

In conclusion, I have endeavored to group together the chief points which will be found helpful in arriving at a correct differential diagnosis of what might be called the surgical lesions of the upper digestive tract. Yet the clinician must not allow himself to be baffled if in many instances, he fails to so adjust these facts as to be able to draw from them a conclu-

sive picture. The very interdependence and close anatomic relationship of these structres preclude this. Rather let me say, when all the evidence has been summed up, this is, or is not, a diseased process of such a nature as to demand surgical interference. If it be surgical, and the patient experiences relief thereby, he little cares whether he has been treated to a cholecystotomy or a gastro-enterostomy.—The Virginia Medical Semi Monthly.

A Mirror of Practice.

THE TREATMENT OF CHILBLAINS.

By F. Gardiner, M.D., F.R.C.S. (Edin).

Like many other, so-called, minor ailments, that of chilblains is too frequently treated lightly in general practice, and this neglect is often construed by a patient into a confession of failure.

Quackery is a plant which, like other weeds, grows readily on neglected soil, and one, therefore, does not wonder at the large number of nostrums which are said to cure this trouble.

I am of opinion that no case need go beyond the erythematous stage, that recurrences can be aborted, and that many cases can be cured.

It is of importance to make a thorough study of the patient's general condition, and to intelligently recognise the stage of the disease.

The two chief points in its etiology are—

(a) that lesions occur at the extremities of the circulation; and

(b) that cold, and more especially rapid variation from heat to cold, start the lesions.

Obviously, these two factors have an interaction; the skin being more readily affected by chill where the blood supply is feeble.

The blood supply is a term which embraces several items.

1st. The blood itself may be diseased, cf. any of the various anæmias.

2nd. The arterial supply may be at fault, cf. disease of the vessels walls, muscular or vaso-motor nerve weakness.

3rd. The venous supply may be impaired, cf. various lesion causing congestion.

4th. There may be heart disease in any of its forms.

These headings include a large number of conditions, which may have, as sequelæ, a lowered vitality of the tissues from insufficient nourishment, and combined with this, or apart, an impaired reaction to irritation. It stands to reason that local means will, in most cases, produce only a temporary improvement, when any of these general states co-exist.

The important point is that the physician should ascertain what general disease is present, and treat it secundum artem. I will therefore only mention a few remedies which should be given internally.

Cod-liver oil and iron almost invariably head the text book list, and, while undoubtedly beneficial, their indiscriminate use is bad. Frequently, patients, with a liberal supply of fat, have been noticed to be taking Oleum Morrhuæ, and persons, with over 80 per cent. of Hæmoglobin, to be taken Pil Blaud. under medical directions.

It is surprising to know the number of mild cases of Raynaud's disease, which are overlooked, the history of blanching fingers, which promptly improve with the exhibition of nitrites, being readily obtainable.

A type of case is every now and then noticed in which calcium salts are followed by successful results, and sometimes from these individuals we get a history of attacks of urticaria, whilst they may even show dermographism. Calcium chloride may be given in 15 gr. doses thrice daily. Cardiac tonics are often helpful, and a peculiarly happy combination, especially for old people, is that of Tincture of Strophanthus with Liquor Trinitrini.

It is desirable that the sufferer should be instructed to avoid chills, if possible, advised to wash in tepid water, and warned against warming his or her extremities at a fire, or making a rule of sitting near it. Children especially will be found to be guilty of romping from a warm fireside to a chilly outside atmosphere.

Local Measures.—Feet and hand wear must be carefully chosen; warm it must be, tight it must not be, and it should not be rough and irritating.

Massage is very helpful, but especially so as a prophylactic. In the erythematous stage it may be too painful to be borne; again, here careful directions as to method must be given.

Two drugs stand out pre-eminently as of value in the early stages, viz., Ichthyol and Formalin.

Ichthyol is well known to have a special effect in reducing congestion. Any strength may be used, but 10 to 20 per cent. in Lanolin serves most purposes. (I have used it in full strength painted on)

This ointment, spread thickly on linen, and worn at nights on the affected parts, often dispels a commencing attack after a few applications. To get over the odorous character, sometimes objected to, its ally, Thigenol, may be used in its stead. During the day it may be used in the form of plasters, if convenient.

With the same end in view, I have tried Adrenalin and Adrenalin and Chloretone ointments, in a like manner, but, although praiseworthy and more suited to æsthetic minds, I do not find them so useful as Ichthyol.

Formalin, an equally powerful drug, is one requiring much more care to employ it satisfactorily. The odour is pungent, but, if there is the slightest abrasion of the skin, smarting effects are still more disagreeably evident. In ointment form, it may be used in 10 to 50 per cent. strengths; this method answers best when the patient has a sensitive skin, when, however, we have to deal with coarser skins, the remedy may be used pure.

The astringent action of the drug may go too far, and then the horny layer of the skin becomes hard and cracks. Consequently, after a few days, it is advisable to stop using it and apply Lanolin or Vaseline. It can be subsequently resumed if necessary. As an antiseptic, it also prevents the complication of subsequent infection of the parts—there being many cases in which recovery is prolonged by the intrusion of surface organisms. If a distinction is to be drawn between these two agents, Formalin might be classed as more effective, more lasting in its results, but much harsher in its action, therefore more suited for the male sex, whilst Ichthyol might be described as more soothing, more simple in its method of application, and undoubtedly better suited for delicate skins. Treatment may accordingly, in some cases where there are cracks, be started with Ichthyol, and finished with Formalin.

Various other applications are also commonly applied at this stage. Of these, Iodine, either as tincture, or painted on in Collodion (2 per cent. Iodine), Silver Nitrate in solution, and Camphorated Spirit, are best known.

Electrical methods have long been recommended, generally galvanism, but as this necessitates, in its simplest form, a considerable number of batteries, it is not universally handy. The Faradic current is easily used, requiring only a small coil with a bichromate cell, two small earthenware basins, such as are used in cooking, two small copper plates and connecting wires. Warm water with a teaspoonful of salt is put in each basin along with a copper plate electrode, which is connected with a terminal of the secondary coil. The current may be varied by raising or lowering the zinc in the bichromate cell, by the draw-tube of the coil, or by altering the depth or position of the copper electrodes in the basin. When the hands or feet are involved, the secondary circuit is completed by the patient placing an affected member in each basin. When other parts, such as the nose or ears, are involved, then one copper electrode is covered with gauze, soaked in salt water, and applied to the affected spot; the circuit being again completed by placing a hand in the other basin, which contains the remaining electrode. Ten minutes of this treatment every night will act promptly in many cases. Recently, a patient had a severe attack on the left little finger and ulnar aspect of the palm. There were two large chilblains, and he could not bend the finger, he applied this method, and, next day, the pain was away, and only slight erythema left. Two sisters, both affected regularly every winter, came under observation, the one, more delicate and suffering from mitral stenosis, used the above means, and no chilblains appeared, the other did not and suffered. The plan suggested above is not new, but is apt to be overlooked in the rush after still more modern ideas. It may be said that the writer has found it very satisfactory chiefly in the early stages, and, while not interfering with the action of other remedies, produces more prolonged results.

An X-ray and high frequency outfit is not always present, but, if available, is more powerful than the Faradic current, can be used in all stages, and is possibly more lasting in its effects.

The treatment is much more expensive, but, in severely recurring cases, should be tried. So far, with my limited experience, it is not possible to say which is better. Three cases have been tried with X-rays and three with high frequency, and although the action of each is different, both were successful.

X-rays have an atrophic effect, this being more pronounced on unhealthy tissue, hence they reduce inflammation and remove pain. Applied, as they have been by me, in doses of 10 minutes' duration, with a hard tube with '5 milliamperes in the secondary circuit, one or two applications have been followed by benefit, when continued thrice weekly, stopping short of reaction, the chilblains eventually disappear.

High frequency currents can be applied by the effleuve, or by the vacuum electrode. In all cases, it is wise also to improve the general tone by giving, at the same time, some 20 minutes of auto-condensation on the couch.

Theoretically, one might advise the use of X-rays, in cases consequent on passive congestion, while high frequency cur-

rents might be recommended where there was vaso-motor nerve spasm.

In the ulcerating stage, the most convenient application, apart from these electrical methods, is the following paste:—

R	Hydrarg. ammoniati	...	gr. v.
	Ichthyolici ...	...	min. x.
	Pulveris amyli,		
	Pulveris zinci oxidi	...	aaʒii
	Vaselini ...	...	℥ss.

This spread unsparingly on linen, and changed frequently, suits most cases. If the ulceration is not severe, or healing is advancing, the recovery may be completed by Beiersdorf's zinc-ichthyol salve muslin.

In conclusion, by the various local means mentioned, coupled with general treatment, all cases should yield, and, if failure occurs, suspect a wrong diagnosis, and that the right one may be Lupus erythematosus

Annotations.

DRINKING WITH MEALS.

The average person should drink about two and a third pints of water a day, and there is no harm in drinking as much as a pint at dinner. Hot water is a distinct aid to sluggish digestion, and a drink of water last thing at night and first thing in the morning is conducive to good health.

POISONOUS PLANTS.

A large number of plants which are usually looked upon as harmless possess poisonous properties. Those who are employed in picking daffodils and narcissus frequently suffer severely from a troublesome skin affection known as "daffodil poisoning." The most trying features of this ailment are the small gatherings which form under the finger-nails. It is said that minute crystals of lime exist in large numbers in the juice of the stems of the pretty blooms, and that these are responsible for the poisoning. Regular daffodil pickers are accustomed to rub their hands with oil and work tallow in underneath their finger-nails before beginning their work. The bulbs of the white Roman hyacinth have similar unpleasant properties.

ONIONS AS GERM KILLERS.

Not long ago a Scotch teacher gave this advice to her pupils: "If you have cholera or scarlet fever in the house, put some onions under the bed and they will sweep away all disease." The onion proved its virtue in a remarkable way forty years ago, when cholera raged throughout London. It was noticed with surprise that one of the most insanitary districts was almost exempt from the visitation. The majority of the inhabitants, being Italians, were great onion eaters.

FRESH AIR.

Fresh air, properly speaking, is not a therapeutic agent in the treatment of consumption, nor is atmosphere a therapeutic agent in the treatment of coal-damp poisoning, nor is depriving a maniac of a loaded revolver a therapeutic measure. These things consist in restoring natural and healthful conditions as nearly as possible. Breathing fresh air improves the health and resistance of anyone who is habitually without it, and that means pretty nearly everybody. Fresh air increases the resistance of those with consumption. It also does the same for those without consumption and for those with other diseases, chief among which is that great symptom-complex from which most of us suffer, and which, for want of a better name, we will call stuffiness, due to the breathing of vitiated air. To advise continuous fresh air for the consumptive alone is hardly fair to those who are still doing their full days work without complaint—they need it too. Let us not neglect them while they are yet not consumptives.

GRAVEYARD SOIL.

The soil of graveyards contains as a rule more bacteria than virgin soil, the difference being most marked in the deeper layers, although the number of bacteria is not so great as one might expect. The bacteria are not most numerous immediately surrounding the coffin, but at some distance above, while at a short distance below the coffin there is a marked diminution in the number. Liquefying bacteria are abundant in the soil in the immediate vicinity of the coffins. Burial has little, if any, effect in increasing the organic matter in the upper reaches of the soil, whereas it has a very marked effect on the layers containing the coffin, i.e., at depths greater than four feet from the surface. The organic nitrogen and carbon in graveyard soil are by no means so great in amount as is commonly supposed.

In Pulmonary Consumption.

Dr. John's CONSUMPTION INHALATION. The Faculty pronounce it the only Cure for Consumption and all Throat and Lung Troubles.

Recommended as a certain remedy in the first and second stages. Is based on scientific reasoning and principles, and is an embodiment of the results of the investigations of Koch Luton and Pasteur, and all the great germ specialists, who have declared that the consumptive germ cannot live a minute in the presence of the ingredients of this wonderful compound. Write to-day. It is a sure cure. The first week's treatment will do more good than all the medicines, Cod Liver Oils, of changes of climate. Don't delay. There is not an hour to lose in cases of Consumption, or any throat or lung trouble. Even in the most advanced and hopeless cases of Tuberculosis and Consumption life is prolonged. Per phial Rs. 4. Packing and Postage 4 As.—Per dozen, Rs. 44.

Dr. T. Foster, A.M., M.D., says—says I can recommend it with every confidence. It is the very best treatment; simple and effective. Dr. L. Paul, M.D., says: It never failed to cure almost every case. Relief was certain.

Avoid imitation: Only from Ellwood, & Co., Globe Chemical Works, Calcutta.

The Indian Lancet.

CALCUTTA: MONDAY MARCH 30th, 1908.

INDIAN MUNICIPALITIES.

The Indian Municipalities are or at least should be in the lines of the County Councils &c., of Great Britain. But here the Collector is generally its official chairman. It is part and parcel of the huge machinery of the bureaucracy of this vast Empire and yet in name more or less it is the type of a local self-government by the City Fathers. For a long time we have tried our level best to bring into public notice the various discrepancies of Municipal administration of this country. We will, however, restrict ourselves to Sanitary questions, which are of the utmost importance to the rate-payers and whose health and welfare the Municipal Corporation is in duty bound to safe-guard. In large cities especially in the United Provinces where naturally there is such a large quantity of dust even in the main public thoroughfares, the City Fathers should have long ago devised some means of lessening the street-dust. We know that particles of dust are potent factors in the causation of eye and lung diseases, and to-day the plague germ is asserted by the highest authorities to be disseminated broadcast by means of dust. When we see that this fatal malady is carrying away an alarmingly increasing number of citizens recently in the large flourishing cities of the United Provinces, (Cawnpore, Lucknow &c., it seems high time that the Municipalities of these parts exerted a little more in diminishing the dust by a proper system of street watering. It is hardly to the credit of the Corporations of these large thriving commercial centres to allow sleepily the old mediæval watercart system) which is a mere apology for desultory sprinkling of water here and there. The main streets and even the so-called Mall Roads are kept in this disgracefully dusty condition. Our readers can well imagine the state of the streets and lanes inside the Indian residential quarters and in the vicinity of Mills and factories. The air in these localities is surcharged almost always with an abundance of dust and suspended impurities, which can in the present knowledge of things, be hardly said to be conducive to health and longevity

The rates of taxation all over this country has been increasing by leaps and bounds, within the last decade also, but may we ask if architectural improvement and electric installations are more urgent to the rate-payers than something substantially initiated to reduce the frightful mortality of these towns.

In many of these towns there is a fairly good water-supply for drinking purposes and we ask the Commissioners of these Municipalities if it is too late to have a liberal supply of unfiltered water for the streets.

This might be an expensive measure in the beginning but we feel sure, when the question is decided impartially it will be found to be done for the public benefit. The ways and means to mitigate dust and smoke in large manufacturing cities in India should be the prime consideration of the Municipal bodies, especially when epidemics are on the increase. It seems an utterly mistaken policy to appoint Health Inspectors and Sanitary Officials, and try inoculative measures and to consider the responsibility of civic bodies to end—may the old adage, "prevention is better than cure is a golden one," even in this iron age of ours. We most heartily appreciate the noble efforts both of these corporate bodies and of the Local Governments to minimise the dangers and infection to which the public is exposed and the dust prevention question strikes us as a most salient one in that direction.

Next we are surprised that in these cities, when in the very face of cholera and other deadly epidemics the municipal boards have not yet enacted any regulations to prohibit the exposing of sweetmeats and other bazaar edibles. Flies and other insects which are great disease carriers swarm on these articles of food and the street sweepings and dust settle on

them thick and yet the City Fathers are at a loss to trace the root cause of these fatal diseases

May we humbly suggest that strict measures should forthwith be adopted to compel these vendors to cover their articles say in a glass show-case, which will admit of no dust or flies &c.

In Calcutta they have just awakened to this measure and it will be well, if the Northern cities did likewise. When the taxes are so Draconian and realised so mercilessly from the rate-payers, the public can reasonably demand that no pains are spared in safe-guarding their lives.

Current Medical News.

A LUNACY SENSATION.

THE CHARGE AGAINST Dr. FORBES WINSLOW.

EXTRAORDINARY STORY.

Dr. Forbes Winslow, the well-known mental specialist, was charged at Action Court on February 19, under the Lunacy Act of 1890, with aiding and abetting Edith M. Lascelles in the matter of receiving, boarding and keeping a young lady named Ethel M. Davies in premises which had not been authorised for the reception of persons of unsound mind.

Mr. Bodkin and Mr. Lester represented the Lunacy Commissioners, and Dr. Forbes Winslow conducted his own defence, but Mr. Churchill watched the case on his behalf.

Mr. Bodkin in his opening statement said that the special purpose of the Act was to prevent persons who were of unsound mind being detained in places which were not under proper supervision. He contended that no one was better able to decide the condition of the woman's mind than was Dr. Winslow. He submitted that he must clearly have known that Miss Davies was of unsound mind.

While at Mrs. Lascelles' Miss Davies bit one of her attendants on the arm and escaped by leaping out of a window. She was at liberty for two or three hours, and was subsequently found at the back door in her night dress. She was now in a lunatic asylum.

Mr. Shaw said he was in charge of the single patient for the Lunacy Commissioners, Victoria-street, and he issued the order to prosecute.

Replying to the defendant, the witness said that the Commissioners were not empowered to issue new licences under any circumstances.

Mr. Bodkin.—But single persons might be taken in unlicensed premises under a proper reception order?

The Witness.—Yes.

Dr. Walter Goodrich, in reply to Dr. Winslow, said that when he visited the house at 19, Burlington-gardens, he stayed only for half an hour. He saw Mrs. Lascelles.

Mr. Bodkin.—What did she say about Dr. Winslow?—She said she had received the patient from Dr. Winslow, and she understood the patient had been in his charge.

Dr. Worth, senior medical officer of the Middlesex County Asylum, said that the patient had been admitted to that institution. She had grown worse since he last gave evidence on the subject.

Replying to the defendant, the witness said the patient had remained in a certifiable condition ever since she had been at the asylum.

A GUINEA A WEEK

Mrs. Eliza Davies, of Skeldon-road, Highbury, mother of the patient, said that at the hearing of the charge against Mrs. Lascelles she stated that she took her daughter to Dr. Winslow. She paid him a guinea a week. When she saw her daughter in charge of Mrs. Lascelles she was very dirty, and on the witness remonstrating with Mrs. Lascelles, the latter replied: "Do you expect her to be kept clean for a guinea a week?"

Examined by Mr. Bodkin, the witness said that after her daughter had become well and was still being taken to the hospital. Dr. Winslow told her he would give her a list of homes. Her daughter said she did not want to go to a home. Dr. Winslow said: "It is either that or a lunatic asylum."

Replying to the defendant, the witness said it was quite true that he had seen her daughter and reported two or three times without fee.

What was there in her condition in April, 1906, which led you to bring her to the hospital in Euston-road for brain disorders?—I took her there more for nervous disease.

Supposing I had recommended a lunatic asylum, would you have been prepared to send her there? Yes.

Dr. Forbes Winslow, addressing the Bench, said he wished to emphasise this part of the case. It had been alleged that he procured Mrs. Lascelles to be in readiness to receive this particular patient whereas neither of them had any idea that she was coming to London. He read a letter from Mrs. Lascelles to Mrs. Davies, in the course of which the words occurred: 'Dr. Forbes Winslow saw her (the patient) the other day, and advised me to send for the relieving officer to put her in an asylum, but I have managed to keep her quiet.'

"Why," said Dr. Winslow to the witness, "go down at once and take proper steps to have her put into an asylum?"—Because I thought it was for you to sign for her to go there.

THE NATURAL & ONLY GENUINE
CARLSBAD SALT

(IN CRYSTALS OR POWDER) is prepared from and contains all the constituents of the famous

"SPRUDEL SPRING" AT CARLSBAD

the water of which is largely prescribed in cases of CHRONIC GASTRIC CATARRH, HYPERÆMIA of the **LIVER, GALL-STONES,** DIABETES, RENAL **CALCULI,** GOUT, and DISEASES of the SPLEEN, &c.

☞ *To avoid Imitations, see that the wrapper round each bottle bears the Signature of the*

Sole Agents, **INGRAM & ROYLE, LTD.,**

EAST PAUL'S WHARF, 26, Upper Thames St., LONDON, E.C. And at LIVERPOOL and BRISTOL.

Samples Free to Members of the Medical Profession on application.

Sold at Chemists, Druggists and Stores.

SAMPLES FREE FROM STANLEY OAKES & CO., 13-2, Government Place, Calcutta.

Cow's Milk may be *Modified* by

Mellin's Food

which attenuates and changes the casein, the proportion of available proteids being thus increased.

MELLIN'S FOOD mixed with fresh cow's milk increases the available and assimilable CARBO-HYDRATES.

Mellin's Food renders the composition of the ash constituents like that of Human Milk.

Complete Tables of Analyses and Samples will be forwarded to Members of the Medical Profession on application.

Mellin's Food Co. for India, Ltd., Calcutta Works, Redclyffe Road, Upton Park, Eng.

REASONS WHY.

KEMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION
EMPS	XCELLENT	EDICINES	RODUCE	ATISFACTION

KEMP'S

PROTUMEN

(Registered.)

Contains 92% Proteid and forms an ideal Food.

Pamphlets and directions on application.

8 As. Re. 1 & Rs. 2.

1. We have a large and highly trained staff of English Qualified Chemists.
2. Our goods are fresh, being prepared on the spot.
3. Our prices are the very lowest, consistent with quality.
4. Our experience as trained chemists enables us to select drugs with certainty.
5. Being large manufacturers, we are in touch with European houses.
6. We guarantee our products to be of B. P Standard.
7. There is no waiting for medicines, they are always ready in India.
8. We test everything periodically, thus ensuring genuineness.
9. We can give any information about *all* drugs.
10. We place forty years of experience in medicine at your disposal.

KEMP'S

PAPARIDINE.

Rx. Papaw Juice	½ gr.
Irisin Concd	½ „
Liq. Potas. P.B./98	1 m.
Dil. Ac. Hydrocy.	½ „
Tr. Card Co. B.P./85	1½ „
Sp. Peppt.	1½ „
Bism. et. Am. Cit.	3 gr.

In each Tablet.

TABLETS.

FOR DYSPEPSIA.

WE CAN SUPPLY

You with any Drugs, Instruments, or article required to your satisfaction both as regards QUALITY and PRICE.

KEMP'S

FLUID EXTRACTS

Reliable, Fresh, guaranteed to Standard.

Save
Waste
Labour
Space, &c.

FOR TINCTURES

PRICE LIST FREE.

Wholesale Price List.

Published in February and August. Free to any Medical man on application. It contains over 200 pages, and gives information and prices of everything connected with Medicine and Pharmacy.

KEMP & CO., LD.,
Pharmaceutical Chemists,
BOMBAY.

KEMP'S

Extract of Chicken

Prepared by Leibig's process from the flesh and bones of Chicken, of exquisite flavour and readily taken by invalids, &c.,

Re. 1-12 per pot.

Proprietors of "The Prescriber's Pharmacopœia" a Standard work in India, Rs. 5 per copy

The defendant emphasised the point that he had no financial interest in this patient whatever, and that anything he had done had been done gratuitously as a hospital doctor.

Dr. Forbes Winslow reserved his defence and was committed for trial.

I. M. S. OFFICERS AND FEES.

AN ENGLISH VIEW.

The British Medical Journal for the 31st August contains a strong indictment of the latest orders of the Government of India on the old question of the fees to be accepted by medical officers for professional services to ruling chiefs and Indian gentlemen. It will be remembered that in 1904 orders were issued which provided that "the native chief or gentleman may offer any medical officer of the Government attending him such fee as he thinks fit to make," but in all cases the medical officer must report the offer to the British authorities. The report was to state the number of visits paid and the period during which the officer was in attendance. A separate report was also to be sent to the medical superior of the official concerned giving a full medical statement of the case, the nature and extent of the relief afforded, the importance of the case from a professional point of view, and so on. The local Government was to satisfy itself that the fee was not out of proportion to the relief afforded, but if the fee was over Rs. 2,000, a full report must be sent to the Government of India for orders. These reports were not to be considered necessary when the fee did not exceed Rs. 50 a visit, or Rs. 1,000 altogether during a year. In July of this year revised regulations were issued which, superseding existing orders, laid down the following rule regarding the receipt of fees for professional services to "ruling chiefs and their families or dependants, Indian gentlemen of high position in a native State, or Indian gentlemen of high position in British India": "A medical officer of Government, before demanding or accepting from any Indian gentleman of the status defined above any fee for professional services rendered, shall obtain by a confidential application made through the local administrative medical officer the permission of the Director-General, Indian Medical Service. Such permission will not be required in the case of fees calculated on the scale of Rs. 16, a visit, or in certain cases Rs. 32, according to recognised custom, unless the total amount thus paid for attendance on a patient or his family during any one month exceeds Rs. 160.

The decision of the requisition for a full medical statement of the case at the time of applying for permission to accept the fee is regarded as a very proper change. The provision was quite unnecessary, unless it was intended as a gratuitous reflection upon the honesty of the medical officers. But this concession is almost the only point about the new order that can be commended. The rules are now extended to the whole of India as well as Native States, and it is laid down that no fee of more than Rs. 160, say, ten guineas, can be accepted without the special authority of Government for services rendered in a single month. "Services rendered" might include serious operations for which the maximum fee laid down is totally inadequate, and no provision is made for consultation fees or for distant visits by road or rail. The interference with ordinary work of many medical officers in civil employ which will result from the extension of the rules to native gentlemen in British India, and the very low maximum fee fixed, will, it is contended, cause much trouble and widespread irritation to all concerned. It is further contended that the new order affects the whole rank and file of the Indian Medical Service, and imposes an uncalled for restriction on their practice throughout the whole of India. A service where such restriction may at any time be arbitrarily imposed by those in power for the time being is not at all unlikely to lose its old and well-deserved popularity and cease to attract the best men from the English, Scottish and Irish schools. The British Medical Journal concludes: "This appears to be the fourth order on the subject issued during the last six or seven years, and each one has contained some provision dealing a blow at the self-respect of an honourable and distinguished service. Is such tinkering politic, and would not the Government of India be wiser to try to undo more fully the harm done, trusting its medical officers more fully, while dealing severely with cases where officers have acted improperly?" There is much sound sense in these plain-spoken criticisms.

VACCINATION IN THE PUNJAB.

The resolution of this Government, dated the 26th, June 1901, reiterated the position as regards the re-organization of the Vaccination Department into two staffs,—special and district, and ruled that the cost of the special staff, which was subordinated to the then two Deputy Sanitary Commissioners, should be paid from provincial funds, and that the cost of the district staff should be paid by District Boards and Municipal Committees to the extent to which members of the department might be employed under each of these local bodies, respectively. In their resolution of the 27th November, 1905, the Government of India stated that the system under which Vaccinators, though paid from local funds, are nevertheless held to be pensionable from general revenues, is open to objection, and that there was no reason why any distinction should be made between them and any other class of local fund employees. They did not accept the view that vaccination

establishments should be on a provincial basis and (though paid by local bodies) should be wholly under the administrative control of the provincial sanitary authorities. They thought therefore that the time had come to place vaccinators on the same footing as other local fund employees, and directed (1) that for the future vaccinators should not be enrolled as servants of Government, nor be employed as a provincial establishment; (2) that vaccinators hereafter employed by local bodies should be wholly under their administrative control and should be on the same footing as other local employees; and (3) that existing incumbents should retain their present rights to pension from Government, where such rights exist. In order to give effect to these directions, His Honor is pleased to issue the following instructions:—In view of the duties performed by members of the special staff, it will continue under the direct control of the Sanitary Commissioner and be paid for by general revenues. It will consist of two superintendents and 14 vaccinators. Six of the latter will be attached to the Vaccine Institute, and eight will be utilised to perform vaccinations in the Simla Hill States throughout the year and to supply leave vacancies in the Institute staff. The two extra vaccinators of the present staff will be absorbed into the district as vacancies occur. As regards the district staffs the Government of India have ruled that existing incumbents shall retain their pensionary right, and the provisions of clauses (f) and (g) of article 763 of the Civil Service Regulations cover their case. The immediate control of vaccinators will in future be exercised by local bodies after consultation with the Civil Surgeon, and in the case of the existing establishment, who have pensionary rights, the Sanitary Commissioner's concurrence shall be obtained before a vaccinator is retired or dismissed. This provision will apply to the existing (pensionable) establishment only. To enable vaccinators to receive grade promotion, which would otherwise be difficult to regulate in the small staff of a district, His Honor is pleased to rule that for the future vaccinators shall be promoted subject to the condition of good conduct and efficient work, according to length of service instead of being promoted as vacancies occur in the high grade.

The statements prepared by the Sanitary Commissioner and appended to this resolution give in detail the establishments employed by Municipal Committees and District Boards, respectively. In all cases where a municipality pays for a portion only of a vaccinator's services, the employee in question shall be considered a District Board servant. Beyond this the statements do not indicate the existence of any difficulties in effecting the proposed transfer. Provincial contributions will be maintained in cases such as that of Mianwali where the District Fund is too poor to afford the charge.

SHORT ITEMS.

Two tiny heaps of a white chemical substance and a piece of cotton-wool with some specks upon it constituted one of the scientific marvels exhibited at the Royal Society's conversazione recently. The three things weighed an ounce and a half, yet were capable of increasing by a third the produce of two acres land. Professor W. B. Bottomley explained the properties of this wonderful ounce and a half of matter. "It is an inoculating material," he said, "beneficial only for pod-bearing plants. The two little heaps of white stuff are food material, while the cotton-wool contains bacilli, the bacillus radicicola. It is the latter which, operating at the roots of the crop, takes the free nitrogen from the air.

After ten years' labour, under the supervision of the Sanitary Engineer, Bengal, an elaborate drainage scheme for the whole of the Serampore Municipality has been produced with the result that the cost is prohibitive. As the water supply with which the town of Serampore is likely to be blest in the near future, and the drainage go hand in hand the Commissioners have done well in resolving that the drainage for Serampore proper should be taken up piecemeal year after year as the funds shall permit.

Estimates in connection with the new Medical College Lucknow, to the extent of seventy-five lakhs, are now being prepared, the fittings, apparatus and surgical instruments alone costing twenty lakhs. Earthwork will be started immediately, and work in connection with the minor buildings shortly.

Four additional officers of the Indian Medical Service have been placed at the disposal of the Punjab Govrenment for plague duty.

Inflammatory Diseases of Intestines.

A moment's thought as to the physical properties of petroleum will show why Angier's Emulsion has attained its enviable reputation as a therapeutic agent in inflammatory affections of the intestines associated with diarrhœa. This agent is a sedative and demulcent lubricant, which undergoes no chemical change in the stomach. Hence, as it passes into the intestines, it covers the inflamed or ulcerated mucous membrane with a soothing adherent protective, which allays local inflammation and prevents irritation from food products. Furthermore, it exercises these effects throughout the entire intestinal canal, from the duodenum to the rectum, and is, therefore, of value whether the inflammation be seated in the small or large intestine.

As Angier's Emulsion is a sterile, germ-free product no germs can grow in it—it prevents the development of bacteria and toxins, and thereby removes one of the principal contributing causes of diarrhœa. Treatment of intestinal diseases with Angier's Emulsion is efficient, because it makes possible the direct local application of a soothing agent to the inflamed areas, which are beyond the reach of other remedies. Either alone, or as a vehicle for the administration of intestinal antiseptics and astringents, Angier's Emulsion is indispensable in treating enteritis, gastro-intestinal catarrh, dysentery, infantile diarrhœa and enteric fever.

ANGIER'S EMULSION

(Petroleum with Hypophosphites.)

THE ANGIER CHEMICAL CO., Ltd., 31 & 32 Snow Hill, LONDON, E.C.

FOR NURSING MOTHERS, WEANED BABIES, INVALIDS and the AGED,

ROBINSON'S PATENT GROATS

"IN POWDER FORM"

This FOOD has an unrivalled reputation of nearly 30 years.

KEEN ROBINSON & Co., Limited, LONDON,
MAKERS OF

KEEN'S MUSTARD.

AN APPEAL.

College of Physicians and Surgeons

OF CALCUTTA.

(Registered under Act XXI of 1860).

This Institution was established with the object of affording facilities for a MEDICAL EDUCATION to Anglo-Indian and Native youths who, for various reasons, are unable to get admission into the existing Government Medical Colleges and Schools. It is under the management and control of an Executive Committee. The education is thorough and the courses complete.

Connected with the College are a small Indoor Male and Female Hospital, also a well-attended Outdoor Dispensary. In both the HOSPITAL and DISPENSARY everything is free: diet, bedding, medicines, medical comforts, etc. The yearly attendance at the outdoor dispensary is over 50,000 cases.

The Executive Committee solicit public support to enable them to fully and more fittingly carry out the objects of the Institution, more especially of the attached Hospital and Dispensary. The College, with its connected departments, have been maintained, in the past, partly from the fees of the pupils which is quite inadequate for the purpose. The expenses connected with the upkeep of the Hospital and Dispensary are enormous.

Funds are urgently required

1. For medicines, surgical instruments, bedding, diet and other hospital necessaries.

2. For building a Hospital which, unlike the present building, will be the property of the College. For the "Hospital Building Fund" subscriptions and donations are specially solicited.

Gifts of clothing, bedding, suitable furniture, furnishings, medicines, surgical instruments, microscopes, pathological and other specimens, medical books and medical journals (old or new) for the library, articles of food (suitable for European and Native patients, etc.), will be thankfully received.

The Members of the Medical Profession, in India, are respectfully asked to co-operate and help, as much as lies in their power.

All communications and remittances to be sent to—

CALCUTTA: *Secretary.*
3 to 3-18, Wellesley Street.

Current Medical Literature.

MEDICINE.

PTOMAINE POISONING.

Dr. Hodgetts, Deputy-Registrar General informs us that on an average for the last four or five years there have been four deaths a year registered as due to ptomaine poisoning in Ontario. In the vital statistics of Chicago, for 1906, one death is ascribed to ptomaine poisoning. Cases of ptomaine poisoning are occasionally reported in the medical press, being traced to poisoning by decomposed meat or fish. Tainted meats, as mince meat "warmed over," veal pie, carelessly kept chicken salad, badly preserved and canned meats, partially-decayed sausages (botulism), have caused violent symptoms of poisoning. Prolonged cooking fails to destroy the toxic action of certain ptomaines in infected meats; also cooked meat kept under certain conditions may become infected with bacteria, as well as when it is raw. On the other hand, bad, putrid meat has been known not to cause toxic symptoms. Fish poisoning has been produced by eating both the fresh and preserved sturgeon and salmon-meat that are affected with an infectious disease peculiar to the fish. Tainted, preserved and canned fish-eels, oysters, mussels, crabs, lobsters, have more frequently caused symptoms of poisoning. In some cases there is a choleraic or gastro-intestinal group of symptoms—nausea, vomiting pain, tenesmus with mucous, and bloody stools. Erythema or urticaria with heat itching and swelling of the skin have been observed. Sometimes cerebro-spinal symptoms predominate with convulsions and paralysis. Dryness and constriction of the throat, dizziness, labored respiration, disturbed vision, jerky speech, or aphonia, perhaps rapid pulse, loss of coordination, numbness, coldness of the extremities, dilated pupils, paresis, collapse, and death within a few hours may ensue. Dr. Von Neusser, (Disorders of Respiration and Circulation, p. 165) draws a comparison between botulism, that is, poisoning by decomposed sausages and albuminous food (both meat and vegetable preserves), and, the symptom-complex of atropin poisoning in so far as the intoxication with the toxin of botulism, but not, when there is an infection with the bacterium coli and bacillus enteriditis, Gaertner's bacillus. He says: "Among the symptoms are dyspnea, with precordial anxiety, annoying and often spasmodic cough, dysphagia, glossoplegia, dryness of the mouth, paresis of accomodation, paralysis of the ocular muscles, ptosis with cardiac weakness, cold, pale skin, and lividity of the mucous membranes. These bulbar symptoms result from the combination of the toxin of botulism with the ganglionic cells of the bulbar uncleı." He says that "intoxications from eating poisonous fish (nusalted sturgeon), also belong to this group. These fish contain a ptomaine with an action similar to atropin, which is destroyed by boiling, and is thus different from the poison by the Japanese tetrodon, which is not destroyed by heat. The symptoms after the ingestion of the various species, sphyrena (including the barracudas), coryphen (dolphin), and scomber (including the common mackerel), are a red or violet complexion, often considerable edema, especially of the lips and eyelids, difficulty in breathing of an asthmatic nature, occasionally acute coryza with sneezing, lachrymation and spastic cough, and resemble closely urticaria of the skin and mucous membranes, after partaking of strawberries, lobster, etc." In making the diagnosis between ptomaine poisoning and arsenic poisoning, Harrington states that there are three points of difference—in arsenic poisoning there is swallowing because of pain; in ptomaine poisoning the pupils are usually dilated, and the muscular prostration is almost as extreme as in palsy.

J. J. C.

A COLD AND ITS TREATMENT.

When exposed to the influence of damp air, sudden changes of temperature, etc., the skin becomes chilled, and the blood is driven from the outside surface to the deeper-seated organs of the body, causing congestion of the mucous membranes lining the air-tube and digestive canal, followed by chills, suppressed perspiration, aches and pains in the bones and back, with slight fever, the disease is termed a common cold. Treatment: This disease is best treated by a warm bath at bedtime and ten grains of Dover's powder, with a free use of warm drinks. Three grains for a child.

—:o:—

SURGERY.

SPLENECTOMY—REPORT OF A CASE.

Dr. G. H. Wood reports the following casse: Mrs. O. B; aged 30, never pregnant. Spleen began to enlarge at 14 years of age, but was not uncomfortable until two years ago, when it began to enlarge rapidly. Eyes began to trouble her at the same time; reading or sewing causing pain; conjunctivae became congested. He explained the pain as a drawing sensation in the eye ball, also difficulty in holding eye lids wide open. During August 1904 began to have rigors followed by neasua and fever. Rigors occurred every two or three days. Calomel and quinine relieved this for two or three weeks. Spleen became so large that she could not lie on back or right side without pain. In November, 1904, the spleen was removed by Dr. W. W. Taylor, of Memphis. It was a simple hyperplasia, possibly due to malarial infection. Made a beautiful recovery

and left hospital in four weeks. In January, 1905, began to have rigors, fever, sick stomach, fever sometimes reaching 103 degrees F., lasting only a few hours. Blood examined, but no malarial plasmodia found. Appetite good, but not abnormal. Lost 25 pounds in weight. Had weighed 165 pounds. After taking calomel followed by castor oil and turpentine repeatedly on February 20th she passed a Tema Solimn. Rigors and fever stopped at once, eyes began to improve and were perfectly well in a few weeks. On the 10th of August, 1905, began a typical case of typhoid fever lasting five weeks, temperature ranging from 100 to 103.8 degrees F. Blood gave typical Widal reaction the second week. From the symptoms there was no doubt of it being typhoid in its most typical form. She made a good recovery and is now in perfect health.

The whole field of medicine and surgery is simple and easy on paper, but the bed side and operating table experience is quite a different proposition. This case illustrates the necessity of closely observing eye symptoms in constitutional disorders. It also illustrates the folly of supposing every case of rigors and fever to be due to malaria.

PAIN DUE TO FOREIGN BODIES.

In the case of pain due to foreign bodies which have been swallowed, no surgeon should be so guilty of malpractice as to administer a purge. The Vienna treatment of mashed potatoes and other soft foods, so ardently advocated by Billroth, is the only rational plan to adopt; and emetics and purges should be studiously avoided. In these, as in certain cases of colic, the use of opium may relax the contracted intestines and permit of copious fecal evacuations.—Dr. John B. Deaver in Yale Medical journal.—Medical Summary.

CANCER RECURRENCE.

As the result of his observations, the writer has concluded that carcinoma is a highly infectious disease. Not that there is any evidence to support the fact of its communicability between one person and another, but that once an individual becomes the subject of cancer, there is not only the liability of its spreading by a well defined infective process, but also in those cases where the surgeon attempts to remove the disease there is a risk of reinfecting his patient from the growth which he is endeavoring to remove. Cancerous infection of wounds is, therefore, of comparatively frequent occurrence, but, unless the infection manifests itself early, the proof is easily overlooked. Cancer infection during operation is responsible for many of the cases of recurrent nodules in the site of operation wounds, and suture-hole infection is exceedingly common. Cancer infection is probably the reason why chronic carcinomatous growths so frequently run a very acute course after attempted operations. In the parent growth the cells are more or less encapsulated in fibrous tissue, but some cells escape during operation and find a resting-place in the wound, which is comparatively unprepared to meet and to resist the invasion. The question of cancerous infection of wounds during operation is a real and exceedingly grave danger and one of the utmost importance. Moreover, it is a danger that cannot be too carefully guarded against, and any failure to avoid it has an important bearing on the question of cancer recurrence.—C. Ryall (Lancet).

OBSTETRICS.

INDICATIONS FOR RUPTURE OF THE MEMBRANES.

Rudaux (La Clinique) points out that the bag of waters is the most important agent in the dilatation of the cervix uteri, and should be kept intact, whether the head is engaged or not, so long as the contractions are normal and the dilatation incomplete. Therefore, when making a vaginal examination during a uterine contraction, the finger must not be allowed to press upon the membranes whilst they are tense, as there is a risk of causing premature rupture. Further, it is to be noticed that this tension of the membranes is apparent before the patient experiences the pain of the contraction, and calls attention to it. There are a variety of cases in which a rupture should be effected before the completion of dilatation. When the uterus is abnormally developed, either by excess of amniotic fluid, or by a multiple pregnancy, or by a very large fetus, it may happen that dilatation which has been progressing favorably becomes stationary, whilst the contractions continue or cease altogether. Under these circumstances, rupture of the membranes will cause the labor to resume its usual course.

NESTLES

FOOD

FOR INFANTS

Recommended by all doctors.

MILO MALTED FOOD

UNTOUCHED BY HAND

DELICIOUS AND HIGHLY NUTRITIVE ASSIMILATIVE AND DIGESTIVE

Ensures a Vigorous and Healthy Growth

PREPARED BY MACHINERY IN THE

MOST UP-TO-DATE AND SCIENTIFIC METHOD

An Absolute Nourishment for Infants, Children and Invalids.

HIGHLY RECOMMENDED BY THE MEDICAL FACULTY.

ALWAYS READY! NO COOKING! THE LATEST FOOD!

PREPARED BY

HENRI NESTLE, LONDON

Local Representatives:—

MEYER SOETBEER & CO., CALCUTTA,

FROM WHOM FREE SAMPLE CAN BE OBTAINED.

When permanent tension of the membranes is diagnosed, the same indication exists, and the same result follows. In such cases there is no protrusion of the sac, the presenting part is well engaged in the pelvis, and the membranes are often very adherent to the lower uterine wall. The sac does not fulfill its physiological function, and prevents the fetal head, for the presentation is nearly always a vertex, from supplying its place.

Early rupture is advisable when the presentation has a tendency to displacement and is liable to become transverse, also after version by external manipulation when it is difficult to keep the fetus in the desired position. Unless the membranes are ruptured a prolapse of the cord can hardly be successfully dealt with, the funis must be carefully replaced behind the presenting part, which then descends, and further danger is avoided.

The most immediate indication for rupture is hemorrhage due to a placenta previa. If a large rent is made in the membranes they will cease to pull upon the placenta, and the additional pressure of the descending part will stop the bleeding. There should be no hesitation in rupturing when the condition of the mother or child calls for a speedy termination of the labor. Intervention is often required in twin pregnancies, since the second ovum may remain intact, the uterus being too much exhausted to overcome the resistance of sac. When the sac does not rupture with strong contractions and after the completion of dilatation, there is no reason to wait. It is in the interest of both mother and child to bring labor to an end as soon as possible. Waiting favors a dissociation of the amnion and chorion, and may produce retention of the membranes during delivery.

ATTEMPTED INDUCTION OF ABORTION BY INTRAUTERINE INJECTION OF FEHLING'S SOLUTION.

Fantscher (Zentralbl. f. inn. Medical) states that a nurse, after missing two menstrual periods, attempted to induce abortion by the intrauterine injection of Fehling's solution. The syringe used was of 1-gram capacity, and was fitted with a nozzle suitable for urethral injections of coccaine. Shortly after the injection she was seized with severe abdominal pain and repeated vomiting. About midnight—fifteen minutes after the injection—the pulse was 52 and irregular. The pain became worse, and the patient was in constant dread. The cardiac sounds were faint and separated by distinct intervals, but were otherwise normal. Respiration was unaffected. The skin was cool. The pulse became more regular after hypodermic injections of camphor and morphine, but remained infrequent —48 to 52. The temperature was subnormal. At 1 a.m. undigested, slimy, brownish masses of rice were vomited. There was no uterine hemorrhage. At 3 a. m. the pulse had almost regained its normal regularity, but was still infrequent. At 3-30 it was 64, at 5130, 86; the temperature had risen to 97.7 F. Later in the morning a slight hemorrhagic discharge from the vagina occurred. The urine contained red and white blood corpuscles, and renal, ureteral, and vesical epithelium. There was slight smarting on micturition; no casts were present. The quantity of urine was at first normal, but on the fourth day was reduced to 10½ oz. Latter the amount again became normal, and on the fifth day the previously hemorrhagic urine regained its normal appearance. There then a few leucocytes and some renal and ureteral epithelium, but no red corpuscles. A number of hyaline casts were found. On the tenth day the urine was normal in every respect. The acuteness of the onset of symptoms was somewhat alarming, but otherwise the patient was never in danger, and recovered rapidly. Nothing but a few clots were found in the vaginal discharge, and it could not be determined whether pregnancy had been interrupted. When the patient was discharged from hospital the size of the uterus corresponded to that of a two months' pregnancy.

The symptoms of poisoning by solutions of salts of copper are said to be cauterization of the buccal mucosa, salivation, tympanites, green vomit, and brownish-red watery stools. The pulse is small and the skin cold. In severe cases these symptoms may be followed by jaundice, paresis of the limbs, and collapse. Most of the copper is excreted by the liver, but, according to v. Jaksch, the kidneys almost always present signs of toxic nephritis. The fatal dose of copper, when taken per os, is said to be 154 grains to 184 grains of the acetate and 154 grains to 308 grains of the sulphate, though Hoffmann states that less than 10 grains of the sulphate may produce symptoms of poisoning. In this case less than one-twentieth of this amount produced alarming symptoms, 1 gram (about 17 minims) of Fehling's solution containing 0.034 gram, or slightly more than ½ grain, of copper. Evidently intrauterine injections in animals, which are followed by toxic nephritis. The urine becomes scanty, and usually contains albumin, and frequently blood. In animals paresis of the limbs is one of the most prominent symptoms. Whether this was present in this case could not be determined.

CYSTS OF GAERTNER'S DUCTS.

By Dr. L. Tarsia (Zent. f. Gynak).—The patient was an unmarried young woman, 20 years old, who had noticed for two years the growth of the tumor until it reached the size of a hen's egg. The tumor ended in a pedicale attached to the lateral line of the vagina in its upper third and was easily removed.

PATHOLOGY.

BACTERIAL CUTANEOUS DISEASES.

Alderson (Journal of Cutaneous Diseases), after a careful study of the specific treatment of bacterial skin diseases, by which he means the treatment by inoculation of heated bacterial suspensions, announces the following conclusions :

It has not by any means been proven that opsonic therapy produces good results in acne vulgaris, furunculosis, sycosis nonparasitica staphylococcia, lupus vulgaris, or tuberculosis cutis, any more expeditiously than the usual approved methods.

Most of the dermatological cases were "much improved." Relatively few were "entirely well." These results were accomplished only after prolonged opsonic treatment extending over weeks and months.

So far none of these cases have been reported by dermatologists, but have come from the records of surgeons and general practitioners, who might very easily misinterpret the clinical picture presented by certain skin diseases in their different phases. For instance, a patch of lupus vulgaris from which the crusts have been washed, and over which superficial healing has taken place, might readily deceive one not specially trained to observe cutaneous lesions.

Opsonic treatment is of undoubted assistance in certain chronic bacterial skin diseases. To produce the best results, much auxiliary treatment is necessary. External and internal medication, dietetic and hygienic measures, and means of producing local hyperemia should also be employed.

EXPERIMENTAL CONTRIBUTION TO EARLY AMPUTATION IN TETANUS.

Hutchings (Sonder-Abruck aus der Rindfleisch-Festschrift, Leipzig), with the idea of determining whether or not amputation is a serviceable therapeutic agent in the treatment of tetanus, conducted a series of experiments. After inoculation of guineapigs on the first outbreak of symptoms a certain number were subjected to amputation. Others were not thus treated. The amputated animals died in precisely the same time and with exactly the same symptoms as those without operation. He noted the same result in the case of dogs, though the latter are comparatively immune to tetanus infection. Similar results were obtained in the case of sheep.

THE HEALING OF ASEPTIC WOUNDS OF THE BRAIN.

Da Fano has made careful experiments on animals to determine the part taken in the repair of the brain tissue by the connective tissue and the neuroglia. The scars examined were produced by lesions made experimentally with removal of a small amount of brain tissue, in the brains of rabbits and dogs. The connective tissue and neuroglia take different parts in the repair of tissue, according to the length of time since the wound. At first the connective tissue takes the whole office of repair, the nerve elements undergoing degeneration ; later a marginal layer forms of nerve tissue, with fibres predominating. Still later, in consequence of the retraction of the cicatrix, the relation between the connective tissue and the marginal nerve layer become more complex and an interlacing of connective tissue fibres and nerve fibres takes place of a complicated nature. The neuroglia in the cicatrix is formed of cells with protoplasmic prolongation in which a fibrillar portion is differentiated from the cytoplasm. It has not yet been determined whether it contains nerve fibres independent of the cells. [La Riforma Medica.]—Charlotte Med. Jour.

—:o:—

THERAPEUTICS.

LIPOMA.

Several cases have been reported of the successful treatment of fatty tumors by Roentgeno-therapy.

The medium tube was used at a distance of 8 to 10 inches, and ten-minute treatments given, three times a week.

I have had no opportunity of testing the value of the ray in these cases.—Dr. Eberhart in The Medical Standard.

DURATION OF IMMUNITY AFTER INJECTION OF ANTITOXIN.

Sitler (Jahrbuch fur Kinderhk) makes these statements.

Seven hundred cases were immunized with 500 units each, of whom one contraced diphtheria thirteen days later, and two six weeks later. Of 212 cases of scarlet fever immunized, four contracted a mild diphtheria. The writer draws the following conclusions as a result of his studies :

(1) Immunization is most effectual for three to five weeks if the patient is not too frequently exposed to the disease.

(2) Non-immunized children contracted the disease more frequently.

(3) Catarrhal affection and traumata shorten the period of immunity.

(4) The duration of immunity does not increase proportionately with the increase of the amount of serum above 500 units.

(5) After repeated injections a condition of anaphylaxia appears.—Charlotte Medical Journal.

HOMMEL'S Hæmatogen

CONTAINS NEITHER ALCOHOL NOR ANTISEPTICS

A combination of 80 parts purified and concentrated Hæmoglobin with 20 parts chemically pure Glycerine and Aromatic Flavouring.

The best of all the existing preparations of Hæmoglobin. More efficacious than Cod-Liver Oil or the ordinary manufactured preparations of Iron. Very strengthening both for Children and Adults. An energetic Blood Former. Increases the Appetite. Aids Digestion.

☞ Extremely useful in **Rickets, Scrofula, General Debility, Anæmia, Weak Heart, Neurasthenia,** and Convalescence from illness such as **Pneumonia** or **Influenza.**

☞ Unsurpassed as a **Strengthening Restorative in Diseases of the Lungs.** Has a very agreeable taste, and is taken with the utmost relish even by Children.

FREE FROM BACTERIAL GROWTH. UNCHANGED BY KEEPING.

These important qualities are guaranteed by using the highest permissible temperature in the process of manufacture (130° to 140° Fahr. for 24 hours). No guarantee of this description is possible for preparations made by a cold process with ether.

☞ **In prescribing, always state "HOMMEL'S" Hæmatogen as spurious imitations are offered.** ☜

ONLY SUPPLIED IN FLUID, NOT IN CAPSULES OR OTHER FORMS.

Infants - - Take from Half to One Teaspoonful twice a day in milk.
Children - „ One or Two Dessertspoonfuls daily, either pure or mixed with any convenient liquid.
Adults - - „ One Tablespoonful twice a day before the two principal meals.

☞ **SAMPLES AND LITERATURE,** *gratis and carriage paid, on application.*

NICOLAY & CO., 36 & 36a, ST. ANDREW'S HILL, LONDON, E.C

AGENTS FOR NORTH AMERICA: LEHN & FINK, WILLIAM STREET, NEW YORK.

Cadbury's cocoa

A CUP-FUL FROM EVERY HALF TEA-SPOONFUL.

Cadbury's Cocoa is not only PUREST and BEST, but also the MOST ECONOMICAL to buy and use.

HORLICK'S MALTED MILK

Absolutely untouched by hand.

Made entirely by Machinery.

Gives Rest to the Brain and Nervous System

MALTED MILK contains all the solid contents of milk in a Powdered form, which dissolves completely in water.
It is the best, purest, and most easily assimilated of all prepared foods.
It is more effectual than any drugs for Sleepless People.
It maintains health and vitality, and restores them when the health is impaired.
It can be prepared in various ways according to season and palate.
It can be taken hot or cold, and is ready in a few moments in either form.

Sold in two sizes by all Agents in India, Burmah, and Ceylon; and

Horlick's Food Company, 34, Farringdon Road, London, E.C.

VINOLIA SOAP

IS ACKNOWLEDGED TO BE

THE FINEST SOAP IN THE WORLD.

FACTS:—

Vinolia Soap
is unsurpassed for the complexion.

Vinolia Soap
lasts well and does not dry or irritate the most sensitive skin.

Vinolia Soap
keeps the skin as soft as velvet.

Vinolia Soap
is a luxury for the Toilet.

Vinolia Soap
is not coloured with poisons, or rendered transparent with chemicals.

Vinolia Soap
is guaranteed pure, and will stand all tests.

Vinolia Cream
for itching, eczema, face spots, prickly heat, sunburn and all skin irritation (in 4 sizes).

Vinolia Powder
for redness, roughness, chafes, excoriations, toilet and nursery (in 4 sizes).

SOLD BY ALL CHEMISTS AND STORES.

VINOLIA Co. Ld. MALDEN CRESCENT. LONDON, N.W.

ERYSIPELAS OF THE FACE.

In this condition Dr. Tison advises painting of the affected part with a saturated ethereal solution of camphor. This acts as a sedative, and rapidly relieves the pain and inflammation. The application may be repeated as often as necessary. Obviously its inflammable nature calls for precautions.—The Dietetic and Hygienic Gazette.

ON THE TREATMENT OF DYSMENORRHEA.

A new treatment for dysmenorrhea, given by Dr. Oscar Polano (Muench. Medizin. Wochenschrift, August 27, 1907), not only is attested by success in his hands, but it deals with an interesting question in physiology, as to the influence upon the menstrual function of activity of the mammæ.

Rehearsing the common classification of dysmenorrhea into (1) those caused by a mechanical obstruction to the flow, (2) those due to endometritis, (3) those regarded as reflex, and (4) the hysterical, the author discounts the pure mechanical factor. He notes the tendency to regard many cases as purely hysterical, and indeed, proof to the contrary is not easy. Pain being the only symptom its reality and strength cannot be objectively known. Many dysmenorrheics show hysterical stigmata and must be treated accordingly.

But, as every practitioner of large experience knows, there remains not a small number of cases which all internal and minor surgical treatment has failed to relieve. For these Polano recommends the new treatment, which has served him well in many cases, in contrast to the lack of success with other methods. The treatment is simple and harmless, being based upon the assumption of an antagonism between the function of the ovaries and that of the mammary glands. As an increase in the activity of one prejudices the function of the other for a longer or shorter time, as their relations during pregnancy and lactation show, the suggestion occurred to lessen the intensity of the pathological forms of menstruation, particularly dysmenorrhea, through artificial stimulation, of the breasts.

Upon this ground the author adapts the Bier method of treating mastitis, by applying the Klapp suction glass to each breast, beginning several days before the expected menstrual period and continuing, if possible, through the peroid. The air is exhausted, by use of a double-cock syringe, to a point of suffusion of the breasts and a sense of strong drawing felt by the patient, but not to the degree of painful sensation. The glasses are applied from one-quarter to one-half an hour at a time daily. After the treatment the breasts retain a hyperemia for hours, with a peculiar fullness, which, after a longer period of treatment, may continue for days.

The objection that this procedure is purely suggestion is set aside by the fact that it has an undoubted influence upon the menstruation, as the cases briefly reported show:

1. Aged 24, curetted three years because of dysmenorrhea, with slight improvement for a time. Six months later operation for appendicitis. Periods then regular, with pain. Later an ovariotomy, because of abscess in right ovary. After this operation suffered with most severe dysmenorrhea, pain beginning several days before the period and continuing four or five days, so that since two years ago patient had to lie in bed each time for five days, with constant pain of a severity that compelled the use of morphine. Objectively slight fixation of right border of uterus (result of operation), but no sensitiveness to pressure. For past nine months patient has been treated regularly by the above method, and she is now able to work during the menstrual period, uses no morphine and is not obliged to go to bed. Experimental stoppage of treatment allowed the dysmenorrhea to return in much milder form, which disappeared promptly with renewal of the treatment.

The periods are much less intense than formerly and with systematic treatment are often postponed five to six days beyond the expected time.

2. Aged 18, dysmenorrhea for nine months with menorrhagia, periods occurring every two weeks and lasting eight days. Treatment with styptics unsuccessful. Curettage refused. With first treatment by author's methods (for eight days before the period) menstruation occurred after interval of three weeks from last period, and weaker than usual. After three weeks' treatment resumed for eight days, period delayed to four weeks, was weaker and lasted four days. Next period the same. Next period, no treatment, interval of three weeks, lasted six days.

3. Aged 24. Married. Nullipara. Uterus movable, appendages free, examination painless. Periods every four weeks, last six to seven days, very strong, with very severe pain for first two days. During past year has had to be in bed on the painful days. After eight days' treatment period began without pain four days after expected time. Transient pain on second day. Flow much weaker than usual. After three weeks, second period of daily treatment, menstruation beginning ten days after expected time, with transient pain on first day.

In these cases, which could be multiplied by similar ones, there occurred, beside the favorable effect upon the dysmenorrhea, a retardation of the menstrual flow, as evidence of the influence of the method upon menstruation.

Complete failure has never been experienced with this method, though the success is not always so marked, in the complete relief of the distress. The author has employed it in a large number of cases during the past year.

ADVERTISEMENT.

MESSRS. LAWRENCE & MAYO, Ophthalmic Opticians of London, Calcutta, Bombay, Madras and Rangoon, prepare at their Lens Works, any combination of Lenses and Prisms within three days of receipt of the formula.

Correspondence.

Audi Alteram Partem.

THE MUSSOORIE SANITARIUM.

A NEW INSTITUTION FOR HEALTH SEEKERS.

To THE EDITOR, THE INDIAN LANCET.

SIR,—Our readers will be interested to hear that a sanitarium for the sick and convalescent has now been opened at Mussoorie by the proprietors of the Sanitarium lately at 50 Park Street, Calcutta. Feeling that more good can be accomplished for their patients if treated in a more invigorating climate, the Managers of the Calcutta institution decided, after much careful deliberation and study of conditions in India, to locate their new establishment at Mussoorie, and after April 1st all in-patients will be received there. For the benefit of resident patients in Calcutta, however, the local bath and treatment rooms will still remain open at 50, Park Street and will be conducted on exactly the same lines as before.

The beautiful hill station of Mussoorie, located in the bosom of the Himalaya mountains, at an altitude of seven thousand feet, amidst mountain scenery which will delight the most critical student of nature, is an ideal spot for the seeker after health.

The method of treatment at the Sanitarium will be strictly rational and natural. Poisonous drugs are eliminated. In their stead are substituted Nature's powerful remedies—Hydrotheraphy, electricity, massage, corrected dietary, sunshine, pure air, exercise and rest.

The scientific use of water as a remedial agent nowadays occupies a very important place and baths of all kinds will be utilised, including the hydro-electric and Nauheim baths. As a remedial agent next to water, electricity is one of the greatest health restoratives, and its various forms will be utilised in the treatment of both acute and chronic diseases. Massage will also have an important part in the methods adopted at the Mussoorie Sanitarium, while last but not least special attention will, of course, be paid to diet.

Youre etc.,

PYTHIAS.

RATS AND PLAGUE.

To THE EDITOR, THE INDIAN LANCET.

SIR,—The facts contained in the last annual report of the Sanitary Commissioner regarding the destruction of rats do not afford much encouragement to those who pin their faith to this method of plague prevention. Colonel Leslie remarks that "since bubonic plague is transmitted, not from man to man, but from rat to man, every infected rat destroyed means the removal of a source of infection," but there are also those who hold that the destruction of infected rats during an epidemic may be a means of spreading plague by driving the plague-carrying fleas to seek a human host. However that may be, the possibility of effecting the extirpation of rats, save in limited and well-defined areas, does not seem very promising. In practically every case it would seem that the reports sent in are silent as to the important question whether the rat-killing operations resulted in a noticeable diminution in the number of rats or whether, as in the case of Tokio, the operations merely enabled the rats to breed faster by reducing the demand upon the means of subsistence. In connection with the campaign in Jagdispur and surrounding villages, one very significant fact is stated. The operations here lasted from April, 1905, to March 1907, and were very energetic and systematic. They covered an area of about 20 square miles with a population of 20,501. In the two years nearly 1 million rats were killed in this area, nearly half a million being in the Municipality of Jagdispur alone. Yet during March 1907, the last month with which the report deals, 50,000 rats were killed in the Municipality and over 97,000 in the other part of the area. That does not look like extermination.

Yours etc.,

S. W. K.

PASTEUR INSTITUTE OF SOUTHERN INDIA.

To THE EDITOR, THE INDIAN LANCET.

SIR,—The first annual meeting of the Central Committee of the Pasteur Institute of South India was held, Surgeon-General Browne presiding. Captain Cornwall, Director of the Institute, presented the report for the month ending February, in which he stated that during the period 186 cases had been treated, 33 being Europeans, 28 Eurasians and 125

Those drugs which invariably effect the immediate relief of menstrual disturbances by acting directly, and in an agreeable manner, upon the reproductive apparatus, are collectively presented in

ERGOAPIOL (SMITH)

The preparation exerts an impressive anodyne and sedative effect upon the uterus and ovaries, and imparts vitality and functional activity to the entire generative system. While the function-promoting action of the preparation is surprisingly prompt, no untoward effects attend its administration.

ERGOAPIOL (SMITH)

IS OF INESTIMABLE IMPORTANCE IN THE TREATMENT OF

AMENORRHEA, DYSMENORRHEA

AND OTHER

MENSTRUAL IRREGULARITIES

DOSE.—ONE TO TWO CAPSULES, THREE OR FOUR TIMES A DAY, ACCORDING TO THE EXIGENCIES OF THE INDIVIDUAL CASE.

Ergoapiol (Smith) is marketed in metal boxes containing twenty capsules. The preparation is obtainable at all prescriptionists.

LITERATURE.—PAMPHLETS BEARING UPON THE THERAPY OF THE PREPARATION WILL BE SENT, POST PAID, ON REQUEST.

MULLER, MACLEAN & Co.
New York, U. S. A., Export Representatives.

MARTIN H. SMITH, COMPANY,
New York, U. S. A.

"In flavour it is perfect.
"Pure and well prepared."—
British Medical Journal.

van Houten's

The cocoa which is unequalled for high quality, delicious flavour, and economy in use.

A COCOA YOU CAN ENJOY.

SOMATOSE (MADE FROM BEEF)

The most Powerful Food known to Science. A true Meat Nutrient, and is especially valuable in all cases of

FEVER, DYSENTERY and INFLUENZA.—*Vide "Lancet" of Sept. 30th, 1899.*

Is acknowledged by Eminent Medical Authorities at Home and Abroad to be THE IDEAL FOOD FOR INVALIDS AND CONVALESCENTS.

It is an almost TASTELESS and ODOURLESS POWDER.
It contains nearly 80 per cent. of MEAT ALBUMEN.
It acts directly as a TONIC and creates an APPETITE.
It is NOT a DRUG, but a THERAPEUTIC FOOD.
It is easily SOLUBLE in Water, Milk, Soup, Coffee, Cocoa, &c.

SOMATOSE IS ALSO SOLD AS A LIQUID

BEING A MORE CONVENIENT FORM OF ADMINISTRATION.

IRON-SOMATOSE

Contains the Tonic Qualities of IRON, combined with the Albuminous Substance of MEAT.
Causes NO GASTRIC DISTURBANCES or CONSTIPATION.
Does NOT AFFECT THE TEETH.
Is a FREELY SOLUBLE preparation of IRON.

MILK-SOMATOSE

Contains the ALBUMINOUS MATTER OF MILK, combined with 5 per cent. of TANNIC ACID.
Is slightly ASTRINGENT and NON-IRRITANT.
Is most suitable for STRENGTHENING WEAK DIGESTIVE ORGANS.
Is ESPECIALLY VALUABLE for INFANTS and CHILDREN.

NOW USED IN ALL THE PRINCIPAL CIVIL & MILITARY HOSPITALS.
Sold by all Chemists.

FULL PARTICULARS FROM—

THE BRITISH SOMATOSE CO., LTD., 165, Queen Victoria Street, LONDON, E.C.

Agents for INDIA, BURMA & CEYLON:

FARBENFABRIKEN BAYER & CO., LD., Hornby Row, FORT, BOMBAY.

Asiatics. Of these four had not completed the total course. One developed hydrophobia on the seventh day after arrival, and eight were still under treatment. So far the treatment has been successful in every case, one death recorded not being reckoned a failure, as the patient had delayed coming for 29 days after being bitten by a mad jackal, and the disease broke out before immunity could be established by inoculation.

Yours etc.,
R. F.

THE HOSPITAL NURSES' INSTITUTION.

To the Editor, The Indian Lancet.

Sir,—The following passages are taken from the Report of the Calcutta Hospital Nurses' Institution for the year ending 31st December, 1907 :—

The Institution, which was originally founded in 1859, chiefly owing to the influence of Lady Canning, wife of the first Viceroy of India, was on the 31st December, 1907, supporting, with the aid of a grant from the Government of Bengal, 123 nurses who are employed in the Presidency General Medical College and Eden Hospitals, beside the Ezra Hospital for Jews and the Eye Infirmary for Natives, while 12 nurses, including 8 from the Lady Canning Home, are on the out-nursing staff. Some out-nursing work is also undertaken by dhais from the Eden Hospital. The duty of training and supervising the nurses has, since 1881, been undertaken by six Sisters of the Community of St. John the Baptist, Clewer, England, whose work has been carried on with untiring zeal and devotion.

The grant from the Government of Bengal of Rs. 50,000 per annum is subject to the stipulation that the Committee collect from the public a sum equal to one-third of this amount, thus practically assuring the receipt of this subsidy. A further grant is received from the Hospital Port Dues Fund, which amounted to Rs. 9,315 for the past year, this sum being calculated at the increased rate of Rs. 15 per head for every seamen treated at the hospitals where nurses are supplied by this Institution. The amount of the subscriptions for 1907 shows a falling off of nearly Rs. 5,000 compared to those for 1906, a deficit of about Rs. 3,000 of this sum being shown under the headings of Entertainments and Offertories. This loss is partly accounted for by the transference of support in some of the Mofussil districts from this Institution to Lady Minto's new Indian Nursing Association, which has been formed to supply nurses for private patients over the whole of India and Burma, excluding the large commerical cities, which have their own established nursing system. The sum of Rs. 1,00,000 was, however, graciously presented to this Institution by Lady Minto at the beginning of the year, out of proceeds of the Fete organised by her in Calcutta with which to form the nucleus of an endowment fund. The amount was duly invested and the Committee decided to devote the interest for the present to the expansion of the out-nursing Branch for the benefit of the public, but the scheme is not yet in working order owing to lack of accommodation for the additional nursing staff required.

The Committee note with regret the small measure of support still received from the Indian community, which is quite out of proportion to the number of Indian patients nursed in the hospitals, and trust that many more will realise their responsibility in this matter during the present year. It was stated in the Report for 1905 that 15 additional nurses would shortly be required at the Medical College Hospital. The appointment of this extra staff was sanctioned by Government in May last year, and provision made in part for their maintenance by the increase in the grant from the Hospital Port Dues Fund already mentioned; but up to the present it has been found impossible to get more than sufficient new nurses to replace those who have left. This is referred to by the Principal of the Medical College in his report and a Committee of Inquiry has been appointed at his request to deal with the matter, which it is hoped may soon be adjusted. The chief difficulty in the way of recruiting the staff would appear to be the smallness of the salary offered and want of prospects, and the Surgeon-Superintendent of the Presidency General Hospital complains that the same reason seriously interferes with maintaining the efficiency of the nursing staff in the hospital of which he has charge. The Committee would therefore earnestly appeal to the public for further and continued support to enable them to overcome these difficulties, which is impossible with the funds now at their command, a loss of Rs. 8,720-3 being shown on the working for the past year, in spite of the provision by Government of an additional grant towards the extra nursing staff not yet entertained.

Details are added in the report with regard to the three principal hospitals in which nurses are provided by the Institution.

Yours etc.,
C. W. S.

SAL HEPATICA

EFFERVESCENT SALINE LAXATIVE.
URIC ACID SOLVENT.

A combination of the Tonic, Alterative and Laxative Salts similar to the celebrated Bitter Waters of Europe, fortified by the addition of Lithia and Sodium Phosphate. It stimulates the liver, tones intestinal glands, purifies alimentary tract, improves digestion, assimilation and metabolism. Especially valuable in Rheumatism, Gout, Bilious Attacks and Constipation.

Most efficient in eliminating toxic products from intestinal tract or blood, and correcting vicious or impaired functions.

WRITE FOR FREE SAMPLE.

BRISTOL-MYERS CO.
Brooklyn-New York, U.S.A.

On sale by Jobbers and Thomas Christy & Co., London, Eng.

A HINDU GENERAL HOSPITAL IN EMBRYO.

To the Editor, The Indian Lancet.

Sir,—It is a matter for sincere congratulation to be told that a scheme to found a Hindu General Hospital is already seriously in hand. We know it is about a year since when the scheme was launched. Dr. Prabhakar, speaking at the Hindu Medical Union, the other day, told his hearers that "the plans of starting a Hindu General Hospital were ripe enough and that he was very glad to announce that the long-needed Hospital of the kind would be a reality, if not this, surely, during the next year." We would piously say Amen and wish that the hope may be sooner realized, the sooner the better. A Hindu General Hospital with branches for infectious diseases is a crying need in Bombay in these days of high death rate and annual Plague and other epidemics. There is a European General Hospital exclusively for the Europeans, the recently started Parsi General Hospital, for the Parsis, besides Dr. Massina's institution and it is really a slur on the charitable instincts of the rich Hindu community in Bombay not to have a General Hospital for Hindus only. It is not that the Hindu community of Bombay is wanting in a spirit of philanthropy. The charities of the late Sheths Gokuldas Tejpal, Premchand, Raichand and others give a direct lie to any such sceptitism. But the foundation of the G. T. Hospital was led at a time when philanthrophy was required to be and actually was cosmopolitan and not sectarian as it is at present forced to be to some extent. In a cosmopolital society the needs of the cosmos must first be met to a certain minimum. This having been done there is nothing wrong to try to benefit classes which can not tead advantage of cosmopolitan institutions. Though, therefore, the Gokuldas Tejpal, and the Sir Jamsetjee Hospitals are institutions excellent in themselves, doing a most noble and philanthropic work, still however we cannot disguise the fact that owing to these institutions being cosmopolitan in character and controlled by the State which is pledged to a policy of neutrality in religious questions they are not taken advantage of by a greater number of even poor Hindu patients on account of religious scruples and on account of the limited accommodation for indoor-patients. And for the middle classes the equipment is not at all what it should be. Ideal Hospitals should be first rate ones, free to the poor and available to the middle classes on suitable payment. That is not the case in Bombay. It is, therefore, urgently necessary that we should like the Parsis recognise the necessity of a Hindu General Hospital, remembering how many deaths occur in the poorer portion of the community, that cannot afford to call in efficient medical aid nor can afford that pure air and nursing which mean half recovery but has to succumb to disease in a spirit of helpless resignation to the evil fates. Half the cure of a sick patient is effected by scientific treatment and nursing, and how is the poor Hindu patient who has to struggle so hard for decent house accommodation and sufficient necessaries of life in these days of high prices, to obtain expert scientific and medical help? A poor and middle class Hindu would prefer aye even does prefer, death to resort to the public Hospitals of the day where he knows that in addition to indifferent treatment he will have to scarifice his religious feelings eat and drink the food which his religion forbids him to eat or drink. If for no other reason, at least from a religious point of view, the Hindus of Bombay should lose no time in founding their General Hospital. There may well be laid down fees for those who can afford. That should tide the present financial difficulty. And as we said, there should be separate wards. Dr. Prabhakar did well we think at the meeting to lay a great stress on the religious aspect. "In this Hospital," he said, "the conveniences of the orthodox sections of the Hindu community will be fully met. Greatest possible care will be taken to respect, the religious and other prejudices of the orthodox people to whom the other hospitals are practically closed." This definition of the aims and objects is sure to enlist the religions and philanthropic sympathies of the Hindus of Bombay. Another object of the Hindu General Hospital, which Dr. Prabhakar placed before his hearers, is sure to recommend itself to the help of the educated rich among the Hindus. He said that "this hospital will also be useful for the fresh graduates to continue their studies practically, which is not possible in other hospitals; workers in the field of science will find enough to try the effects by various drugs, European of course but also the native ones." We have only one Medical College in the whole Presidency, the Grant Medical College attached to the Sir J. J. Hospital. This Hospital is wholly closed to students, who wish to continue their post-graduate studies, in science and research. There is a wide Hindu Medical Literature, and a still wider misjudged Hindu Pharmacopia, waiting and anxious to be brought to the test of western science and research, which no institution can be expected to do full justice to, other than the kind of the Hindu General Hospital contemplated. It is therefore to be earnestly hoped that the Hindu General Hospital will be a realized fact this year or the next at the latest. And let us hope that out of that and the Parsi General Hospital we shall one day have in our midst a Swadeshi Medical College too with a post-graduate Research Institute attached.

Yours etc.,

INTERESTED.

Wanted known, that a Dispensary, where all medical and surgical accessories are available has been opened at 3, Wellesely Street, under the name of Ellwood & Co. Dr. Das attends daily.

Prescriptions dispensed day and night, and urine analysis done.

In all disorders of the respiratory tract in which inflammation or cough is a conspicuous factor incomparably beneficial results can be secured by the administration of

Glyco-Heroin (Smith)

The preparation instantly diminishes cough, augments expulsion of secretions dispels oppressive sense of suffocation, restores regular, pain-free respiration, and subdues inflammation of the air passages.

The marked analgesic, antispasmodic, balsamic, expectorant, mucus-modifying and inflammation-allaying properties of

Glyco-Heroin (Smith)

explain the wonderful curative action of the preparation in the treatment of

Coughs, Bronchitis, Pneumonia, Laryngitis, Pulmonary Phthisis, Asthma, Whooping Cough

and the various disorders of the breathing passages.

Glyco-Heroin (Smith) is admittedly the ideal heroin product. It is superior to preparations containing codeine or morphine, in that it is vastly more potent and does not beget the by-effects common to those drugs

DOSE—The adult dose is one dram, repeated every two or three hours. For children of more than three years of age, the dose is from five to ten drops.

Glyco-Heroin (Smith) is marketed in one-pound bottles, thus enabling the physician to prescribe whatever amount the individual case may require. The prevailing prescriptions are for three ounces. The preparation is obtainable at all prescriptionists.

LITERATURE.—Exhaustive literature bearing upon the preparation will be sent, post paid, on request.

MULLER, MACLEAN & Co.
New York, U. S. A., Export Representatives.

MARTIN H. SMITH, COMPANY
New York, U. S. A

Schering's

Argentamine. Ten per cent. solution of Silver Nitrate in Ethylenediamine. An organic Silver Salt possessing the property of penetrating very deeply into the tissues. Its use is not accompanied by the many inconveniences to the patient which are found with the ordinary Silver Salts.

Chloralamid. Superior hypnotic without harmful or unpleasant by-effects, having the following advantages over Chloralhydrate:—Its action develops more gradually. The depressing effect of Chloral upon the heart is counteracted by the action of the formamide contained in Chloralamid. It does not cause headache. Chloralamid should on no account be dispensed in hot solutions.

Lævulose. Fruit-sugar for Diabetics, being perfectly assimilated, and constitutes therefore a superior dietetic also for consumptive patients.

Phenocoll. Soluble Phenacetine. A valuable anti-pyretic, anti-rheumatic, and anti-neuralgic. Recommended in malarial fever. Harmless to the action of the heart and circulation of the blood.

Piperazine. Freely dissolving urinary deposits, is promptly eliminated by the kidneys, and perfectly harmless. Strongly recommended in all cases of uric acid diathesis.

Sublamine. A preparation containing Mercury Sulphate and Ethylenediamine in chemical combination. By the presence of Ethylenediamine the irritating action to the skin is entirely avoided, and, what is extraordinary important, a most phenomenal penetrative power is secured for the metallic disinfectant, inasmuch as the presence of Ethylenediamine prevents the coagulation of the albuminous substances of the skin usually produced by metallic agents, and thus permits of easy and deep penetration of the Sublimate without any inconvenience. Recommended for thorough hand disinfection. [of Berlin.

Registered Trade Mark. Manufactured under the control of Prof. Dr. A. Nicolaier,

Urotropine. A valuable urinary antiseptic and uric acid solvent, very efficient in all suppuratory diseases of genito-urinary tract, pyelitis, cystitis, with ammoniacal decomposition of the urine, phosphaturia, and also in gouty and rheumatic affections, where active elimination of uric acid and the urates is required. Highly recommended in typhoid bacteriuria as a prophylactic against the spread of typhoid fever.

FULL REPORTS ON APPLICATION TO
A. & M. ZIMMERMANN, 3, Lloyds Avenue, London, E.C.

WE are walking in the dark when we prescribe a preparation of unknown strength. We are compelled virtually, to make a physiological test of the drug upon our patient. The manufacturing pharmacist should do this work for us. He has facilities that are not available to the physician and the dispensing pharmacist. Let the manufacturer of drug extracts standardize his preparations by chemical assay when possible, and by physiological assay when the older method is inexpedient. Then the physician will be spared the humiliation of palpable impotence in the face of danger. There will be no occasion for experiment at the bedside.—*From Editorial in Buffalo Medical Journal, U.S.A.*

The Test of Time and Experience

THIRTY YEARS OF CONFIDENCE on the part of the Profession have established, beyond all question, that

NERVOUS EXHAUSTION

NEW LIFE & VIGOR

Nervous Exhaustion, or Neurasthenia, as it is now called, is well defined by that world-famed scientist and investigator

DR. JAMES H. BEARD, M.A., M.D.,

to be "a chronic functional disease of the Nervous System, the basis of which is impoverishment of Nervous force, waste of Nerve tissue in excess of repair, hence the lack of inhibitory or controlling power—physical and mental—the feebleness and instability of nerve action, and the excessive sensitiveness and irritability, local and general, direct and reflex. The fatigue and pain that temporarily follow excessive toil or worry or deprivation of food or rest, are symptoms of Acute Neurasthenia, from which the chronic form differs only in permanence and degree. Nervousness is really Nervelessness." There are thousands of people who, given up as incurables, their strength and powers undermined as a result of Nervous Exhaustion, to whom "NEW LIFE AND VIGOR" are magic words, are languishing for the greatest of all blessings: Robust Health and Restored Vitality. To all such we commend the use of B. & S. SOLUTION, the celebrated remedy discovered by Dr. Lawrence, M.D., which has been used in all parts of the world for over quarter of a century.

B&S. SOLUTION

Registered and protected against infringements under the Trade Marks Act

is a scientific exhibit of a combination of well-known drugs of the highest possible quality and at once recognizable by the therapeutist as a MOST VALUABLE NERVE TONIC

The Survival of The Fittest

This remarkable compound, the result of the latest developments of modern Chemistry, Pharmacology, and Therapeutics, is without an equal in all cases of Nervous Exhaustion and Premature decay, whether induced by worry, overwork, or other exhausting causes. As a real nervine tonic and invigorating agent it has no equal in the whole field of Therapeutics and may be relied upon to impart "NEW LIFE AND VIGOR," and to restore weakened constitutions to pristine strength and energy. When every other medicine has failed, B. and S. SOLUTION has been prescribed in the most inveterate cases by the best physicians with success, and there are thousands of living witnesses to attest to the benefits derived from this great modern invention. The Profession will find it to be without a rival and the finest medicine ever brought to their notice.

DOCTORS TESTIFY

In strong terms to the merits of B. & S. Solution in such words as the following:

Dr. Dhever, L.M.S., Shimoga: "My patient is improving."—Dr. Day, M.B., Tirhut: "From the use of one bottle of your preparation, I have received such encouraging report from a patient that I intend whenever I have a chance to recommend it."—Dr. Hill, M.A., M.D., Dharampore: "The results are surprising and are more than I anticipated."—Dr. Das, L.M.S., Dinapur: "Send another bottle. The first appears to have done some good."—Mr. M. M., Dacca: "Send three bottles, as ordered by Dr. Burnett." Mr. M., Kindat: "I am recommended by the Civil Surgeon that B. & S. Solution is a good remedy for Nervousness and Debility."—Dr. Spinner, B.A. M.D., Ootacamund: "I have used nothing in my practice better."—Dr. Mudliar, Medical Specialist, Madras: "Surprised at the results."

B. & S. SOLUTION is put up in two sizes:—Per bottle, Rs. 3-8 and Rs. 6, (32 & 64 doses.)

REGISTERED SOLE PROPRIETORS:

LAWRENCE & LYNCH,

LONDON Empire Chemical Works CALCUTTA

OVER 30,000 TESTIMONIALS.

CAUTION.—The Proprietors will take immediate legal proceedings against all persons pirating their registered Trade Mark, "B & S. SOLUTION," Labels, Wrappers, &c., or Advertisements, or in any other way infringing their rights.

Registered Telegraphic Address: INDIGENOUS, CALCUTTA.

Reviews of Books.

Lectures on Medical Jurisprudence and Toxicology. By Fred. J. Smith M.A., M.D. Oxon., F.R.C.P. Lond. F.R.C.S. Eng.

Publishers. Messrs. J. & A. Churchill have pleasure in sending the accompanying volume for Review.

They will feel much obliged if a copy of the issue containing a notice of the work is sent to their Office. The price of the book is 8s. 6d. net.

7 Great Marlborough Street, London, W.

This is a very condensed, easy and useful work. It is most ably written from the lecture notes of Dr. Fred Smith. We cordially recommend its use to students and to practitioners who wish to refresh their memory from time to time. It is very carefully arranged.

With the Publisher's Compliments.—Title.—Maynard's Manual of Ophthalmic Operations. By Lt: Col: F.P. Maynard, M.B. (Durh.) D. P. H. (Camb), F. R. C. S. (Eng.) I.M.S. Medical College, Calcutta.

Price Rs. 6. 1908.

This is a practical book especially dealing with operations on the Eye. It has in detail described the various cataract operations. It will be found to be of great value by Practitioners and Ophthalmic Surgeons in this country. It has many useful practical suggestions from the author's experience. The book is very well got up and illustrated suitably.

Government Medical Notifications.

INDIA.

Captain E.C. Hepper, I.M.S., assumed charge of the Civil Medical duties of the Peshawar District on the afternoon of the 4th of March 1908, relieving Lieutenant-Colonel G. W. P. Dennys, I.M.S.

Lieutenant-Colonel G. W. P. Dennys, I.M.S., made over charge of the duties of Superintendent of the Peshawar Jail to Captain E. C. Hepper, I.M.S., on the afternoon of the 4th March 1908.

The services of 3rd class Assistant Surgeon F. H. O'Leary, Indian Subordinate Medical Department, are placed at the disposal of Government of Burma for civil employment in that province with effect from the 31st December 1907.

The services of 3rd. class Assistant Surgeon W.H. Passanha, Indian Subordinate Medical Department, are placed at the disposal of the Government of Burma for temporary civil employment in that province in connection with plague with effect form the 31st December 1907.

The services of 3rd class Assistant Surgeon L. McCurtis, Indian Subordinate Medical Department, are placed at the disposal of the Government of Burma for temporary civil employment in that province in connection with plague with effect from the 18th December 1907.

The services of 3rd class Assistant Surgeon E. F. Gomes, Indian Subordinate Medical Department, are placed at the disposal of the Government of Burma for temporary civil employment in that province in connection with plague with effect from the 12th January 1908.

BENGAL.

Lieutenant-Colonel J. G. Jordan, I.M.S., Civil Surgeon, Midnapore, is appointed to act as Police Surgeon and Professor of Medical Jurisprudence, Medical College Calcutta, during the absence, on leave, of Major W. D. Hayward, I.M.S., or until further orders.

Captain C. F. Weinman, I.M.S., on special duty in connection with plague in Bihar, is appointed temporarily to act as a Civil Surgeon and is posted to Midnapore.

Lieutenant W. G. Maydon, R.A.M.C., Regimental Medical Officer, Dinapore, is appointed to have medical charge of the civil station of Dinapore, in addition to his own duties, with effect from the forenoon of the 1st March 1908, vice Captain J. McKenzie, R.A.M.C.

Babu Ambika Charan Datta, second grade Assistant Surgeon of the Charitable Dispensary at Berhampore, is granted privilege leave for six weeks, with effect from the 13th February 1908.

UNITED PROVINCES.

Civil Assistant Surgeon Govind Chandra Banerji, attached to the Sadr Hospital, Farrukhabad, has taken privilege leave for two months, with effect from the 29th January 1908.

Civil Assistant Surgeon Benoy Bhushan Roy, is appointed on reserve duty, Ghazipur, to the charge of the District Hospital, Budaun, as a temporary measure.

Civil Assistant Surgeon Sham Manohar Lal is appointed on reserve duty, Bareilly, to the charge of the Sandila Dispensary, Hardoi district.

Civil Assistant Surgeon Mahim Lal Deb, in charge of the Sadar Hospital, Bara Banki, is hereby removed from the service of Government with effect from the date on which he may be relieved.

Lieutenant-Colonel J. M. Cadell, I.M.S., Civil Surgeon is transfered from Jaunpur to Ghazipur.

ORIENTA APERIENT WATER

Is a clear, pure water, containing the most soluble purgative salts effectively combined.

Acts as an intestinal antiseptic, as well as a purgative, eliminating germs and preventing auto-infection (ptomaine poisoning). This action is solely due to sodium sulphite contained as a fixed compound in the water.

Is acceptable to nearly all patients, as it never produces nausea, weakness nor thirst. In its use purgation is not followed by constipation, as is unfortunately and commonly the case with other purgative waters.

Does not weaken; it produces a tonic effect, stimulating the whole system; appetite is increased, sallowness and foulness of the breath disappear, headaches and vertigo vanish.

Is the only purgative water the use of which is unaccompanied with disadvantages in genito-urinary diseases.

Relieves women suffering with hemorrhoids and diseases of the uterus and ovaries, by reducing the congestion of the pelvic viscera.

Re-establishes the normal flow of bile, and is thereby a prophylactic in cases of biliary colic, due to the passage of biliary calculi.

Is indicated in cases of flatulency, bilious attacks, eczema, glandular enlargements and scrofula.

Benefits chronic nervous conditions, atony of the stomach and intestines, certain forms of diseases of the heart and circulatory system, chronic cases of skin affections and certain diseases of the lungs.

If used regularly alone, will often suffice in cases of influenza, diarrhœa, malaria, gastric and febrile disorders and infectious diseases by enabling the engorged, digestive, circulatory and lymphatic systems to regain their normal condition.

Acts in trifling doses. One small winegiass taken on an empty stomach immediately before breakfast produces a well-marked laxative effect in an adult. The dose for women or children should be reduced to one-half or one-third.

Is now considered an indispensable mineral water, especially in large city practices where it is important to husband the patient's strength, under penalty of their developing anæmia, or breaking down under the nervous strain and becoming neurasthenics.

Is cheapest because best. It is now prescribed by the leading physicians and stocked by all first-class retail druggists.

The ORIENTA Manufacturing Co., Cal., Ind.

A sample bottle will be sent free to any Physician if he will pay express charges.

SOLD EVERYWHERE.

LAWRENCE & LYNCH'S

PRUNIMENVIB

UTERINE ALTERATIVE.

Exercises a tonic influence on the pelvic Organs; An alterative action on the uterine tissues; Relieves congestions, encourages peristalsis; Removes spasmodic conditions; Regulates the vascular Supply. A Safe and certain Remedy.

ASSURE RESULTS BY PRESCRIBING PRUNIMENVIB.

FROM ALL CHEMISTS.

THE

LONDON DIRECTORY

CONTAINS

Maps of London and Suburbs,
Arranged in Atlas form, for convenient reference without folding.

Street Guide to London,
Locating the positions of the Streets, Roads, Lanes, Squares, Market Place, &c.

Commercial Directory of London,
An Alphabetical Register of Businesses in the City and surrounding London Districts

Trade Directory of London,
With exhaustive references connecting kindred trades.

List of Export Merchants,
Showing the Goods they ship, and the Foreign Markets they supply.

List of Steamship Lines,
Arranged under the Ports to which they sail, and indicating the approximate Sailings.

Local Trade Directories of over 100 Suburban Districts,
Arranged so as to be equally serviceable for circularising, canvassing, or ordinary reference purposes.

Appendix of Leading Provincial Firms, etc.,
Classified under their Trade Headings, and giving some details of their specialities.

IN · MEMORY · OF ·
CAROLINE · SOBIESKI · LYNES · DAUGHTER · OF
JOHN · WYNNE · OF · GARTHMEILIO · ESQUIRE · AND
WIFE · OF · REV^D · JOHN · LYNES · OF · TOOLEY · PARK ·
LEICESTER · DIED · AT · CHESTER ·
ON · 26^TH · AUGUST · 1886 · AGED · 88 ·
AND · OF · EMMA · CATHERINE · LYNES ·
DAUGHTER · OF · THE · ABOVE · WHO · DIED · AT · CHESTER
ON 22^ND APRIL · 1893 · AGED · 57
✝ BURIED · AT · S^T CATHERINES · LLANGWM ✝

ESTABLISHED JANY. 1852.

BROWN & COMPANY,

MONUMENTAL SCULPTORS, ETC., ETC.,

IMPORTERS OF MARBLE, GRANITE, STONE, STATUETTES AND STATUES FOR CHEMETRIS. WREATHS AND IN MEMORIAM CARDS.

Highest Quality Church Mural Brass Tablets. Plaster of Prais for Studious. Hospitals, and Engineering and building purposes.

Iron Railings, Marble and Parian Fingures.

THIOCOL "ROCHE."

For the Treatment of Tuberculosis.

ADVANTAGES OF THIOCOL OVER ALL OTHER GUAIACOL PREPARATIONS:

THIOCOL is non-toxic.
THIOCOL is absolutely inodorous.
THIOCOL is readily soluble in water.
THIOCOL has no irritating effect upon the mucous membrane.
THIOCOL is rapidly absorbed by the system.

THIOCOL TABLETS "Roche," 0·5 grammes (=8 grains), in tubes of twenty-five.

SIROLIN, an ORANGE SYRUP of THIOCOL, keeps indefinitely, and never spoils. Pleasant flavor. In original bottles only, of about 150 grammes=about 5 ozs.

AIROL "ROCHE."

FOR THE TREATMENT OF

Wounds, Burns, Varicose Ulcers of the Leg, Inflammation of the Cornea, &c.

ADVANTAGES OF AIROL OVER IODOFORM:

AIROL is non-toxic.
AIROL is inodorous.
AIROL has no irritating effect.
AIROL dries up wounds readily.
AIROL assists the granulating process.
AIROL in contact with warm secretions of the body immediately gives off a small quantity of Iodine.
AIROL contains Bismuth.

Manufactured by F. HOFFMANN—LA ROCHE & CO., Basle.

Samples and Literature on application to the Sole Agent for Great Britain

HUGO LORENZ, 7-8, Idol Lane, London, E.C.

Trade Mark—HELLENA—Trade Mark.

Look for our Name on Protecting-band, Label, and Wrapper. Beware of Counterfeits

As used in the Harems of Persia and the East

HELLENA

NOTHING ELSE LIKE IT FOR THE HAIR

THE GREAT HAIR PRODUCER AND RESTORER.

The Very Finest Dressing, Specially Prepared and Delicately Perfumed for the Toilet.

HELLENA

Produces Luxuriant Hair, Prevents its Falling off or Turning Grey.
Unequalled for Promoting the Growth of the Beard and Moustache.

THE RENOWNED REMEDY FOR BALDNESS.

For Preserving, Strengthening, and Rendering the Hair Beautifully Soft; for Removing Scurf, Dandruff, &c., also for MAINTAINING THE ORIGINAL COLOUR OF HAIR.

"HELLENA" PRESERVES, STRENGTHENS, AND INVIGORATES CHILDREN'S HAIR.

HELLENA FOR THE HAIR.

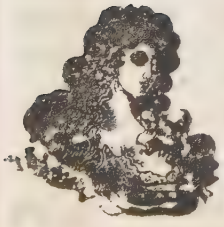
As a medicated Hair Oil this preparation is unsurpassed, and absolutely unique; it in no way resembles anything being used in this country, being the identical and much-prized Hair Stimulant used in the Harems of Persia and the East. It possesses a delicate fragrance.

The verdict of scientific men everywhere, and of the public generally, has awarded the first and foremost place to HELLENA as a toilet and perfumed hair oil. It is used throughout the country by the European and Native gentry, Maharajahs, Rajahs, Maharanees and Ranees, Zemindars, Judges, Doctors and gentlemen and ladies of the highest social rank, and is more highly prized than the many imported hair oils of European and American manufacture. As a Therapeutic Agent, HELLENA soothes the brain, increases the power of intuition, stimulates the mental faculties, cools the scalp, improves the memory and regulates hasty judgment.

In 3 ozs. phials, Re. 1. Per dozen, Rs. 11.

Sole Proprietors:—LAWRENCE & LYNCH, Calcutta.

Lawrence & Lynch, Empire Chemical Works, Calcutta.



EUROPEAN AGENCY.

[ESTABLISHED 1814]

WE wish to open accounts with all *bona fide* Colonial Buyers who are not already on our books, and on receiving precise details of their exact requirements, we shall be pleased to forward quotations for any European or American goods. Our reference books contain several million names, and our extensive connection enables us to make special terms with the most suitable wholesale manufacturers of each class of goods, so that evenafter adding our shippings commission of 1¼ to 5 per cent. (according to amount) our prices still compare favourably with those of the manufacturers.

We supply goods made specially to any style, quality or price; and on receipt of indent, with full and clear instructions, and remittance of cash, or produce to cover, our knowledge of the trade enables us to place the order at once in the best hands, and the goods are promptly forwarded.

We make up sample cases of most goods from £5 upwards; and, as we utilise our long experience in choosing such goods as are most likely to suit the market for which they are intended, we confidently recommend buyers to order these sample cases, for by doing so they will obtain the latest and most takng novelties.

Consignments of produce receive careful attention, and we give advances to any extent.

Prompt and painstaking attention to the interests of correspondents, together with exceedingly moderate charges, and plain and straight forward dealings, have enabled us to maintain for the greater part of a century, a reputation which we value too much to allow it to be tarnished by the unsatisfactory execution of a single transaction.

ADDRESS:—

WILLIAM WILSON & SONS.

MERCHANTS & MANUFACTURERS' AGENTS,

25, ABCHURCH LANE, LONDON, E. C.

Correspondence Invited.

Bengal Paper Mills Co., Ld.,

CALCUTTA.

WHOLESALE PAPER MANUFACTURERS

THE Company's productions have found much favour amongst buyers, and the mills have been enlarged in order to meet the ever-increasing demand.

SPECIALLY FAVOURABLE CONTRACTS ARRANGED WITH MERCHANTS, NEWSPAPERS AND PRINTING PRESSES.

Sample Books and Prices on application to

BALMER, LAWRIE & CO

MANAGING AGENTS,

108 Clive Street, Calcutta.

THE INDIAN DAY-BOOK.

Published Monthly.

The HANDIEST and MOST UP-TO-DATE

REFERENCE BOOK IN INDIA

A useful Book for the Home.

All Kinds of information with plenty of room for notes and memorandum.

Annual Subscription Rs. 4. 8.

Single Copies As. 6.

N.B.—No FREE Sample Copies.

HEAD OFFICE—DELHI.

A SPEEDY and POSITIVE RELIEF for

PRICKLY HEAT

CHAFING, SUNBURN, ACHING FEET and all SKIN AFFLICTIONS is found in

MENNEN'S

BORATED TALCUM

TOILET POWDER

FACSIMILE of Box. Beware of Spurious Imitations.

Delightful after Bathing. Soothing after Shaving.

Recommended by leading Physicians and Nurses the world over as THE HYGIENIC TOILET POWDER.

Prepared by G. MENNEN CHEMICAL CO., Newark, N.J. U.S.A.

For Sale by Komp & Co., Ltd., Bombay; Buchgass & Co., Calcutta; W. E. Smith & Co., Madras; E. Brooks & Co., Karachi; Fitch & Co., Mussoorie and all Chemists and Bazars.

Sole Agents for Asia, MULLER, MACLEAN & Co., New York, U.S.A.

CASCARA EVACUANT.

THE ENERGETIC PROPERTY OF CASCARA SAGRADA WITHOUT ITS BITTER PRINCIPLE.

CASCARA EVACUANT
An active and agreeable preparation of the unchanged bitterless glucosides of Cascara Sagrada, possessing all the desirable laxative properties of this valuable drug.
DOSE:
As a laxative, 10 to 15 minims three times a day; as a purgative, 20 to 30 minims morning and evening.
FROM THE LABORATORY OF
PARKE, DAVIS & CO.
DETROIT, MICH

CASCARA EVACUANT should not be confounded with the multitude of "tasteless" cascaras with which every physician is familiar. It is scientifically prepared from the well-seasoned bark of the true *Rhamnus Purshiana*, and presents unimpaired the laxative non-bitter glucoside of that important drug. It is the most active, the most eligible, of all palatable preparations of Cascara Sagrada.

When we introduced it to our physician friends we predicted that it would prove a revelation. It was no idle prophecy. *The verdict of the profession is unmistakable.* CASCARA EVACUANT has fulfilled every promise made for it. IT *is* A REVELATION!

(Supplied in pint, half-pint, quarter-pint and half-gallon bottles.)

LABORATORIES:
DETROIT, MICH., U. S. A.
WALKERVILLE, ONT., CAN.
HOUNSLOW, ENG.

PARKE, DAVIS & CO.

BRANCH HOUSES:
New York, Kansas City, Baltimore, New Orleans, Chicago, London, Eng.; Montreal, Que.

Mercurol.

Supplied in the form of powder in ½ oz., ¼ oz., & 1 oz. bottles; and as Chocolate-coated Tablets, ½ gr., ¼ gr., 1 gr., and 2 grains.

Full literature on request.

A TRUE chemical combination of Mercury (10%) with Nucleinic Acid. It is soluble in water, and does not coagulate albumen.

Mercurol is well adapted to the treatment of purulent conditions of a specific character on mucous surfaces, and has been found useful in

SYPHILIS,
GONORRHŒA,
OPHTHALMIA NEONATORUM,
CONJUNCTIVITIS,
OTITIS MEDIA,
and as an ordinary ANTISEPTIC DRESSING.

See articles in *Lancet*, 22/9/00, 15/12/00; *Medical Times*, 21/3/03.

Nargol.

Supplied in 1 oz., ½ oz., and ¼ oz. vials.

Literature on request.

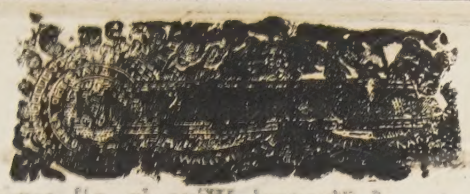
A CHEMICAL compound of Silver with Nucleinic Acid, containing about 10% of Silver. It is readily soluble in water, and possesses great penetrating power, with a very lasting effect. Solutions of **Nargol** are not precipitated by coming in contact with albuminoids. **Nargol** is strongly bactericidal, and has been particularly recommended in the treatment of various diseases of the genito-urinary tract, acute contagious ophthalmia, and suppurative conditions of the lachrymal sac.—See *British Medical Journal*, 2/11/01.

PARKE, DAVIS & CO.,

111, QUEEN VICTORIA STREET, LONDON E.C.

DETROIT, NEW YORK, CHICAGO, &c., U.S.A. *SYDNEY, AUSTRALIA.*
WALKERVILLE & MONTREAL, CANADA. *SIMLA (Punjaub), INDIA.*

Telegraphic Address: "CASCARA, LONDON."
Telephone No: 5040 BANK.



Established over 32 years.

EASY Reading Glasses to help your sight means glasses that are accurately and correctly fitted to the actual requirements of the eye. No trying to make the Eyes fit the Glass, as is too often the case.

Mullick & Co., the Pioneer opticians of the Metropolis will fit your eyes with a pair of their real Brazilian pebble Spectacles as you prefer and which will enable you to read perfectly without any effort or strain. If, therefore, you need glasses, there is every reason why you should have them from **Mullick & Co.**, the Pioneer opticians of the Metropolis.

Mullick & Co., will give you the benefit of skilled service free, and fine goods at fair prices.

You may do as well somewhere else, but you may not, and what is the use of taking chances.

Our Newly revised Price List sent free to any part of India.

MULLICK & CO.,

OCULIST OPTICIANS,

Branch : Benares. *37 Swallow Lane, Calcutta*

BALMER, LAWRIE & CO.,

BANKERS AND AGENTS,
CALCUTTA.

INVESTMENTS.—Government and other securities Debentures, Shares, etc., purchased, sold, and received for, and delivered from, safe custody. Dividends and interests collected at an uniform charge of ½ per cent. commission.

REMITTANCES.—Drafts granted at the current rate of Exchange. Periodical family payments in England arranged on

CURRENT ACCOUNTS opened and conducted free of charge; interest credited half-yearly on minimum monthly balances of not less than Rs. 500.

FIXED DEPOSITS in sums of Rs. 500 and upward received for stated periods, on which interest is allowed, payable either in India or England. Terms on application.

Pay Bills and Pensions realised.

"Monthly Share List" forwarded free, on application.

Managers in India for the Scottish Amicable Life Assurance Society (Established 1826). Endowment assurances effected on favorable terms. Prospectus and full particulars forwarded on application.

LONDON AGENTS:

Messrs. ALEX. LAWRIE & Co.,

14 St. Mary Axe, C.E.

Supplied to Her Majesty Queen Alexandra.

THE GREAT FLORA AIR PURIFIER.

PETAL DUST.

The Sweetest and most lasting of perfumes.
Price As. 4 per packet.

Edward Cook's Lightning Soap: the quickest washer.

Price As. 7-6 per packet of 3 doubles.

Jones Bro's., Steel Trunks.

Single lock	...	As. 4-6 per inch.
Triple lock	...	„ 5-6 „

To be had of

RELIANCE WORKS Co.,
2, Lalbazar Street.

A New Book for Pharmacy Students and others.

CHARACTERS AND IDENTIFICATION OF DRUGS.

ILLUSTRATED. Cloth Rs. 2, By T. H Bonnar, Asst.-Surgeon M.C.P.S., L.S.M.D. Apply to Newman & Co., or School Book Society, Calcutta; Higginbottam & Co., Madras and Bangalore Thacker & Co., Bombay Golab Singh & Co., Lahore Am. Baptist Press, Rangoon.

—A most practical and useful book—which should be in the hands of every medical student in India.

(Editor "Indian Medical Gazette.

METHYLOIDS

A GONOCOCCIDE AND URINARY ANTISEPTIC
AN ADVANCED AND CLEANLY METHOD OF
ADMINISTERING METHYLENE BLUE,
WHICH AS A GONOCOCCIDE AND
URINARY ANTISEPTIC IS
HIGHLY ESTEEMED

Methyloids are capsoids—tiny, completely filled capsules—of chemically pure methylene blue combined with the highest quality of such synergetic remedies as copaiba, santal, Haarlem and cinnamon oils, making them almost

A SPECIFIC TREATMENT

for gonorrhoea, gleet and all conditions of the urinary tract requiring an antiseptic diuretic.

Methylene blue is strongly germicidal, especially to gonococci, and being eliminated through the urine, to which it imparts a deep-blue color, is of peculiar value in the treatment of bacterial infections of the urinary organs.

Only the purest methylene blue should be used internally. Each batch of this agent used in Methyloids is tested by expert chemists and verified as being a chemically pure article. **Methyl blue** and its admixtures have led to poisoning when used through mistake for methylene blue.

Methyloids possess a therapeutic merit peculiarly their own and must be tried to be appreciated.

Are offered in amber vials, 40 each.

A Liberal Sample will be sent to any Medical man upon Application.

STEARNS' WINE

(Vinum Olei Morrhuæ, Stearns)

An Efficient Tissue Builder Tonic and Alterative.

THE value of Stearns' Wine in all conditions requiring a reconstructive tonic is attested by thousands of the most successful physicians in all parts of the world.

It is a delicious vinous preparation of the active medicinal principles of cod liver oil combined with iron peptonate. It does not contain any of the nauseating grease of cod liver oil, which is so universally despised and which is so deleterious to the digestive functions.

Stearns' Wine may be employed with confidence in pulmonary tuberculosis, general debility, malnutrition, convalescence, and as a rebuilder generally.

This is offered in 16-oz. bottles and 9-oz. bottles.

Literature will be Mailed to any Medical man upon Application.

FREDERIC STEARNS & CO.

Manufacturing Pharmacists, DETROIT, MICHIGAN, U. S. A.

EUQUININE

IS

TASTELESS QUININE

AND

THE ONLY RELIABLE REMEDY

FOR

Malaria, Fever, Whooping Cough, etc.,

Obtainable through all Chemists.

SOLE AGENTS:

Schroder Smidt & Co.-Calcutta

BOUND VOLUMES

Of *The Indian Lancet*, with a carefully compiled index, for 1892; 1893; 1894; 1895; 1896; 1897; 1898; 1899 and 1900:—

May be had on application to the Manager, *The Indian Lancet*, 3, Wellesly Street, Calcutta.

SMOKE

THE "DARLING' CIGARS,

The best Holland Havanas

Rs. 5-8 per 100.

SOLE AGENTS:

T. KERODE & CO.,

1, Chowringhee, Calcutta.

PRINTED AND PUBLISHED BY M. M. FERNANDEZ, AT THE "INDIAN LANCET" PRESS, No. 3 WELLESLEY STREET CALCUTTA
Sole Agents for Great Britain: Messrs. Gordon and Gotch No 15, St. Bride Street Ludgate Circus London E.C.